University of Alberta

The Design and Uses of Bath-House *Palaestrae* in Roman North Africa

by

Craig P. Taylor

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in partial fulfillment of the requirements for the degree of

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in
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Abstract

The topic of this thesis is the *palaestrae* of Roman Africa. Although many examples of *palaestrae* have been found in North Africa, there has never been a study solely focused on these facilities. They have usually been considered only in the context of Roman baths and as features of bath buildings. This thesis examines *palaestrae* in a new light and analyzes their role as athletic facilities within the sporting culture of Roman Africa. The Roman provinces of North Africa have yielded a particularly rich body of evidence for athletic games and festivals, making this region ideal for studying this topic.

The concern of the thesis is twofold. The first issue is the design and construction of *palaestrae* in Roman Africa. There is discussion of their form, of construction techniques, and of their place in the overall design of baths. The second issue is how their form relates to function. There is a discussion of how *palaestrae* accommodated athletic activities, such as training and competition.

The thesis concludes that *palaestrae* in Roman Africa were an important part of local athletic culture, used for training and possibly for competition. Greek and Roman models influenced their design, but climate played a significant role. Great effort was made to ensure these buildings were kept cool, not only by placing them in less exposed areas but also by insulating them from the heated rooms of the baths. Local resources and building techniques were important factors in their construction. This thesis includes a gazetteer of *palaestra* sites in Roman Africa and a catalogue of all inscriptions relevant to the use of *palaestrae*.

Acknowledgements

This thesis is the product of many years of hard work, which includes contributions from my family and friends. I would like to thank my supervisor Dr. Jeremy Rossiter for sticking with it and assisting in the editing of many drafts. I would also like to thank Dr. David Mills for the extra push and assistance towards the completion of this project. Furthermore, I greatly appreciate the many differing viewpoints offered by Dr. Rossiter, Dr. Mills, and Dr. Fracchia. I would like to thank my parents and sister for their support and patience during this project. I would also like to thank my dog, Sadie, for providing me with timely breaks, as well as my two cats, Nero and Messalina, whose contributions to writing this thesis, although unessential, were greatly appreciated. Finally I thank my loving and supporting wife, whose infinite patience during these years helped keep me sane. The sacrifices you have made and the help you have given me have not been unnoticed; I thank you endlessly and love you even more.

Craig Taylor
March 27, 2009

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Abbreviations

AA	*Archäologischer Anzeiger*
ActaAArtHist	*Acta ad archaeologiam et artium historiam pertinentia*
AÉ	*L'année épigraphique*
AJA	*American Journal of Archaeology*
AJN	*American Journal of Numismatics*
AntAfr	*Antiquités africaines*
AntCl	*L'Antiquité classique*
AnatSt	*Anatolian Studies*. Journal of the British Institute of Archaeology at Ankara
ArchCl	*Archeologia Classica*
BAA	*Bulletin d'archéologie algérienne*
Ballu, *Rapport*	*L'archéologie algérienne de 1895 à 1915 : les rapports d'Albert Ballu publiés au Journal officiel de la République française de 1896 à 1916 /rassemblés et édités par Agnès Groslambert, maître de conférences à l'Université Lyon III* (Lyon, 1997). The reports of A. Ballu from 1895 to 1916 are all taken from this book.
BAC	*Bulletin archéologique du Comité des travaux historiques et scientifiques*
BCTH	*Bulletin archéologique du Comité des travaux historiques et scientifiques.* Fasc.B, Afrique du nord
BSAS	*Bulletin de la societe archéologique de Sousse*
BSNAF	*Bulletin de la Société nationale des antiquaries de France*
Bull. Acad. Hipp.	*Bulletin de l'Académie d'Hippone*
CÉDAC Carthage	*Centre d'études et de documentation archéologique de la Conservation de Carthage*
CIL	*Corpus Inscriptionum Latinarum*

CJ	*Classical Journal*
ClAnt	*Classical Antiquity*
CP	*Classical Philology*
CRAI	*Comptes rendus des séances de l'Académie des inscriptions et belles-lettres*
CW	*Classical World*
EpSt	*Epigraphische Studien*
ILAfr	*Inscriptions latines d'Afrique*
IAlg	*Inscriptions Latines de l'Algérie*
ILTun	*Inscriptions latines de la Tunisie*
IRT	*The Inscriptions of Roman Tripolitania*
JO	*Journel Officiel*
JRA	*Journal of Roman Archaeology*
JRS	*Journal of Roman Studies*
JThS	*Journal of Theological Studies*
LibAnt	*Libyan antiqua*
MAAR	*Memoirs of the American Academy of Rome*
MEFRA	*Mélanges de l'École française de Rome, Antiquité*
NAMS	*Nouvelles archives des missions scientifiques*
OJA	*Oxford Journal of Archaeology*
PBSR	*Papers of the British School at Rome*
PSAM	*Publications du Service archéologique de Maroc*
QAL	*Quaderni di archeologia della Libia*
RA	*Revue archéologique*

Rafr	*Revue Africaine*
REA	*Revue des Études Anciennes*
RM	*Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung*
RMDAI	*Mitteilungen des Deutschen archaelogischen Instituts.* Roemische Abteilung 150-Jahr-Feier DAI Rom: 150-Jahr-Feier Deutsches archäologisches Institut Rom, Ansprachen und Vorträge, 4ß7 dez. 1979, Mayence, 1982
RSC	*Recueils de la Société archéologique de Constantine*
ScAnt	*Scienze dell'Antichita: Storia, archeologia, antropologia*
TAPA	*Transactions of the American Philological Association*
ZPE	*Zeitschrift für Papyrologie und Epigraphik*

Introduction

> *Palaestra* (*ae*):
> A colonnaded enclosure for athletic exercise; originally a part of the Greek gymnasium, in Roman usage it was the exercise yard of baths.[1]

Many of the Roman baths in North Africa have been studied, in some instances quite extensively, and while scholars, such as Newby, recognize the importance they played as locations for athletic activity, they do not adequately discuss the one area of the baths most likely linked to this type of activity, the *palaestra*.[2] *Palaestrae* have usually been considered simply as adjunct spaces in baths, but they have rarely been discussed in their own right. When they have been discussed, it is only briefly, demonstrating a serious lack of interest on the part of scholars. The important role they played in athletics is also passed over. Recent scholarship has embraced the idea that the Romans were enthusiastic supporters of athletics.[3] This was particularly the case in North Africa. Studies by authors such as C. Hugoniot, C. Briand-Ponsart, C. Dobias-Lalou, and G.G. Fagan, all demonstrate the popularity of athletics in North Africa, and point to the presence of a strong athletic culture, which involved the organization, practice, and performance of Greek-style athletics.[4] Although these studies all contribute to the discussion of Roman athletics, they do not address the important role that *palaestrae* had. This thesis will be the first to examine the *palaestra* of North Africa in detail, and the function they served within North African athletic culture.

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[1] F. Yegül, *Baths and Bathing in Classical Antiquity* (New York, 1992) p.492.

[2] See for example Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003). Z. Newby, *Athletics in the Ancient World* (London, 2006).

[3] See for example J. König's *Athletics and Literature in the Roman Empire* (2005), Z. Newby's *Greek Athletics in the Roman Empire: Virtue and Glory* (2005) and "Greek Athletics as Roman Spectacle, The Mosaics from Roman Ostia" *PBSR* 70 (2002) pp.171-203, S. Sande's "That's entertainment! Athletics, Mime and Theatre in the Armerina Villa" *ActaAArtHist* s.a. 11 (1999) pp.41-62, and N.B. Crowther's "The Sebastan games in Naples (IvOl.56)" *ZPE* 79 (1989) pp.100-102 and "Nudity and morality: Athletics in Italy" *CJ* 76 (1980-81) pp.119-123.

[4] C. Hugoniot, *Les Spectacles de l'Afrique Romaine: une culture officielle municipale sous l'Empire romain* (Paris, 2003), C. Briand-Ponsart, "Une évergésie modeste: les combats de boxe dans quelques cités d'Afrique proconsulaire pendant l"Empire" *AntAfr* 35 (1999) pp.135-149, C. Dobias-Lalou, « Une epigramme de Cyrene pour deux athletes » *QAL* 16 (2002) pp.145-149, and G.G. Fagan, "Gifts of *Gymnasia*: A Test Case for Reading Quasi-Technical Jargon in Latin Inscriptions" *ZPE* 127 (1999) pp.263-275.

North Africa is the focus of this study because of the wealth of available evidence, which includes archaeological, literary and epigraphic. There are also archaeological reports providing a good amount of information on the *palaestrae* in North Africa. Finally I have a personal familiarity with some North African *palaestrae*, such as at Lepcis Magna, Carthage and Dougga. Limiting the research to this region will also generate questions regarding regional design. Did North African *palaestrae* follow a prototypical Italian model, or are there characteristics, which give these buildings an 'African' identity?

The first step will be to define the architectural features of *palaestrae* in Roman North Africa, looking at their architecture, decoration, dimensions, building materials, layout, and location within the community. From this a clearer picture will emerge of the form of North African *palaestrae*. Once this has been established, the function of *palaestrae* and their role as venues for athletics in North Africa will also be examined. There are three categories of physical exercise that can be associated with *palaestrae*. The first is the recreational exercise and competition undertaken by any ordinary citizen. The second is athletic exercise and training undertaken by professional athletes in preparation for competition, and the final category is the actual athletic competition.[5] Given the limited size of most *palaestrae*, any mention of athletic exercise and competition occurring in *palaestrae* refers primarily to boxing, wrestling and the pancration. Finally there will be a discussion of terminology. The term *palaestra* does not appear in the North African epigraphic record and therefore discussion is made to clarify the use of this word, as well as to determine other possible words used to identify this kind of building.

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[5] See below the discussion on sources concerning the circumstantial nature of the evidence regarding athletic activity occurring in *palaestrae*.

In order to better understand how *palaestrae* fit into the athletic culture of North Africa, it is first necessary to understand the composition of the population in this region. Although Carthage was destroyed by Rome in 146 BC during the third Punic War, the region around Carthage was still populated, albeit sparsely, with indigenous people. There was also Greek influence in the region, coming in part from Greek colonies that had been established in Cyrenaica from the 6th century BC onwards and in part from Hellenistic Sicily.[6] Greek trade with North Africa flourished during the Punic period and with this trade came many types of migrants: sailors, merchants and settlers who opened North Africa up to the cultural riches of the Greek world.[7] After the Roman defeat of Carthage, the pace of influence from across the Mediterranean gathered pace. After obtaining power, Julius Caesar (49 – 44 BC) implemented a new settlement plan for North Africa. He wished to settle both veteran soldiers and landless peasants in the provinces of North Africa.[8] After Caesar's death, this organization and resettlement of North Africa had to be implemented by the emperor Augustus (27 BC – AD 14), his adoptive son.[9] Augustus reorganized the provinces and established thousands of legionary soldiers in the region, giving them land as a reward for service. Examples of these colonies include the veterans of the 13th legion settling in the city of Uthina, veterans of the 8th legion settling in Thuburbo Minus and veteran soldiers settling in Maxula.[10] These three new colonies were placed under the jurisdiction of Carthage. Thus Carthage and the surrounding area in the 1st centuries BC and AD were populated with a mixed population of indigenous peoples and Roman settlers.

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[6] S. Raven, *Rome in Africa* (London, 1993) p.10 and S. Lancel, *Carthage: A History*, Trans. A. Nevill (Oxford, 1997) pp.303-350.

[7] See Lancel (1997) pp.303-350 for a discussion on the influx of Greek culture and goods into North Africa.

[8] D.L. Bomgardner, *The Story of the Roman Amphitheatre* (London, 2000) p.121 and A.R. Birley, *Septimius Severus: The African Emperor* (London, 1988) p.7.

[9] Cassius Dio, 52.42.

Further reorganization of North Africa occurred under the Julio-Claudian emperors (AD 14 – 69), including the annexation of Mauretania, an area consisting of Morocco and western Algeria. Caesarea became the capital city of eastern Mauretania, while Tingis became the capital of western Mauretania.[11] After this, the emperor Claudius (AD 41 – 54) established a veteran colony at Oppidum Novum, as well as giving colonial status to many of the cities in the region, including Caesarea and Tingis. The Flavian emperor Titus (AD 79 – 81) established a military camp at Lambaesis in eastern Algeria, as it was a strategic location for controlling the region of Numidia. In the 2nd century, the Antonine emperors established more veteran colonies in North Africa, including at Thelepte, Thamugadi, Sitifis and Cuicul, which were all located in Tunisia or eastern Algeria.[12] When the emperor Hadrian (AD 117 – 138) visited North Africa, he promoted the advancement of veteran colonies and indigenous communities, the latter including Utica, Bulla Regia and Thuburbo Maius.[13] Hadrian was a generous benefactor, who encouraged local building projects. In AD 193 Septimius Severus became emperor. Coming from North Africa, Severus bestowed many of its cities, especially his hometown of Lepcis Magna, with donations and benefactions.[14] He also granted colonial status to many communities and encouraged the aspirations of communities with indigenous peoples, giving some of them, such as Thugga and Thysdrus, municipal status.[15] The Severan Age was a time of great prosperity in North Africa, which saw much building activity.

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[10] Uthina: *CIL*.VIII.2427, Thuburbo Minus: Bomgardner (2000) p.248, n.11, and Maxula: Pliny the Elder, *NH*.5.24.

[11] Bomgardner (2000) p.122 and Raven (1993) p.61. Caesarea was the capital of the province Mauretania Caesariensis and Tingis was the capital of the province Mauretania Tingitana.

[12] Bomgardner (2000) pp.122-123.

[13] Bomgardner (2000) p.124.

Roman emperors aggressively settled North Africa, particularly in Tunisia and eastern Algeria, with veteran soldiers from the end of the 1st century BC to the end of the 2nd century AD. Outside of this geographical region, Roman influence over indigenous communities was extended by means of benefactions, including building projects, and of grants of colonial status which was given as a reward for allegiance to the emperor.[16] Therefore by the beginning of the 3rd century AD, the population of North Africa was an amalgamation of indigenous people, veteran soldiers and their descendants, and settlers from other parts of the Mediterranean. The presence of communities of retired soldiers may have encouraged the development of training facilities, among them *palaestrae*, in the towns of North Africa. *Palaestrae* were spaces used for recreational exercise and thus good places for soldiers to keep fit and train. They were also good spaces for athletes to exercise and train. North African *palaestrae* were also always connected to baths, which were an important part of Roman culture.[17] Baths were a key component in new urban developments and Roman soldiers, experienced in building, were sometimes employed to construct them, along with their *palaestrae*.[18] The military may thus have played a significant role in the extension of the bathing and athletic culture which developed in Roman North Africa.

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[14] For further information on the emperor Septimius Severus and his home city of Lepcis Magna, see Birley (1988).

[15] Bomgardner (2000) p.125. Although there was a native population here the community was likely populated with veteran soldiers as well. C. Lepelley, *Les Cités de l'Afrique Romaine au Bas-Empire, Tome II : Notice d'histoire municipale* (Paris, 1981) p.319.

[16] Military presence was another factor in keeping the indigenous peoples under control. See for example Tacitus, *Annals* 2.52; 3.20-21, 73-74; 4.23-26, who mentions the rebellion under Tacfarinas and Tacitus, *Hist.*2.98; 4.49-50 for the rebellion under Festus.

[17] Yegül (1992) p.4.

Who the participants and spectators of athletic competitions in North Africa were is hard to determine. The evidence, both literary and artistic, demonstrates that some North Africans became athletes, while inscriptions and art demonstrate that local benefactors gave athletic competitions to their communities and used *palaestrae* for self-promotion. The best evidence indicating who the athletes, benefactors and spectators were comes from inscriptions. Inscriptions, which give the names of benefactors, demonstrate that they were usually local citizens. They rarely, however, mention the ethnicity of the performing athletes. The epigraphic evidence suggests that athletic shows were usually given to the inhabitants of the North African community in which the benefactor lived. Who comprised this community, whether they were indigenous peoples, Greeks, or Romans, is uncertain. Images of spectators are seldom shown in art, with exceptions coming from the *venatio* (animal show) mosaic from Thelepte, and the circus mosaic from Gafsa.[19] Although the faces of male spectators are shown in these two mosaics, their ethnicity is uncertain. They are typically light-skinned in appearance and could therefore be Greek, Roman, or light-skinned indigenous peoples.[20] The lack of dark-skinned peoples within the crowd does not indicate that they were not interested in watching athletic contests.[21] Therefore, although the evidence does allow for some conclusions about who these North Africans were that were involved within the athletic culture of Roman North Africa, pinpointing their exact ethnicity is very difficult.

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[18] Roman soldiers were often responsible for constructing many structures as they marched into new territories. See for example *ILS*, 9134.2487, Josephus, *A History of the Jewish War* 3.71-97 and Vegetius, *A Book about Military Affairs* 1.1, 9-11, 18, 19, 2.23, 25.

[19] See K.M.D. Dunbabin, *The Mosaics of Roman North Africa: Studies in Iconography and Patronage* (Oxford, 1978) for more information on these two mosaics.

[20] The owner of the mosaic may have put himself, his friends or his family on the mosaic, which may have not included anyone of Negroid descent. See the discussion in Chapter One regarding the participation of North Africans in athletics.

The sources

In determining the form and function of North African *palaestrae*, archeological evidence provides our main source of information. In most of the works devoted to Roman baths, such as Thébert's *Thermes Romains D'Afrique du Nord*, Neilsen's *Thermae et Balnae*: *The Architecture and Cultural History of Roman Public Baths*, and Yegül's *Baths and Bathing in Classical Antiquity*, *palaestrae* are mentioned but rarely discussed in detail. The North African *palaestrae* used in this study are in varying states of preservation, but in most cases enough remains to determine the architectural appearance of *palaestrae*, which includes their dimensions, building materials, and arrangement within baths. These details come from original excavation reports making them exceptionally valuable for this study.[22] Although these reports are primarily from the late 19th and early 20th centuries, and very little is said about the archaeological remains of *palaestrae*, what little evidence they do provide is crucial for helping to establish the form of *palaestrae*. One reason for the lack of detail regarding the architectural appearance of *palaestrae* is that these excavations were generally done in the context of exploring baths and not *palaestrae*. This lack of interest means that for many North African *palaestrae* there is very little existing evidence. However in a few cases, such as at Volubilis, Carthage, Lepcis Magna and Gigthis, there is much more evidence available, which helps to provide a better picture of North African *palaestrae*.

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[21] Just as the lack of female faces does not indicate that women avoided or did not watch athletic shows.
[22] See Appendix 3 for a bibliographic list for each *palaestra* identified in North Africa.

Although this study will be primarily archaeological, literary and epigraphic sources will also be examined. Some of the inscriptions from North Africa provide insight into the function of *palaestrae*, as well as demonstrate that the region had a strong athletic culture. There are also several North African writers whose writings touch, either directly or indirectly, on the topic of athletics and *palaestrae*, including Tertullian, Apuleius, and the anonymous author of the *Passio de Perpetua*. Non-African authors, such as Vitruvius, Galen, Martial, Suetonius and others, will also be used, as they supply important evidence regarding athletics and *palaestrae*. Many of these sources demonstrate that various forms of exercise took place in *palaestrae*, but they do not specifically mention athletic exercise, training and competition. The evidence for these activities in *palaestrae* is largely circumstantial, deriving from a handful of key texts and inscriptions which relate to athletics. I believe, however, that there is enough in the sources to allow us to draw some reasonable conclusions about the connection between athletic training and *palaestrae*.

Artworks, mainly sculptures and mosaics, will also be used, both when discussing the history of athletics in North Africa and when explaining the function of North African *palaestrae*. There are approximately a dozen mosaics with athletic imagery, and most of these were located in baths.[23] The high percentage of athletic mosaics found in baths reminds us that baths were structures where athletic activity often occurred, usually in the *palaestra*. The range of sculptures found in North African *palaestrae* will be analyzed to see what they may tell us about the kinds of activities that took place there.

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[23] See Appendix 5 for the list of artworks found in North Africa depicting athletic imagery.

Parameters of the Study

It is necessary to outline the geographical and temporal boundaries of this study. North Africa today encompasses all the countries between Morocco and Egypt, but for this study Egypt will not be included. Egypt was a Roman province that had a unique cultural tradition and as a result possessed many social and cultural forms that were very different from the rest of Roman North Africa. To incorporate the data from Egypt would make the scope of this study much too broad. Instead this topic should be researched independently. Therefore, this study will look at evidence from present-day Morocco, Algeria, Tunisia, and Libya. The period in North Africa that will be researched will be from the beginning of the 1st century AD, when the first *palaestrae* begin to appear, to the beginning of the 5th century AD, when the Vandals conquered the region.

Organization of the thesis

Before studying the form and function of *palaestrae*, this study will begin by examining the history of athletics in North Africa during the Roman period. The purpose is to show that athletic culture in North Africa was strong. This will include an examination of both the large athletic festivals held in some of the bigger cities, as well as the small athletic contests held throughout North Africa. Inscriptions, literary sources and artwork will all be utilized to demonstrate this. The discussion will also determine what facilities were used to hold these types of spectacles, leading to the conclusion that the *palaestra* was one such structure.

After establishing that there was a strong athletic culture in North Africa, the evolution of *palaestrae* will be discussed in chapter two. I will begin by examining the 1st century BC Roman architect Vitruvius's description of a *palaestra*, because he was the first to describe this structure. Although Vitruvius says that he bases his description on Greek models, the structure he describes includes features that do not typically belong to Greek *palaestrae*. Regardless, I will determine how closely his description resembles both Greek and early Italian *palaestrae*. This will help to establish a rudimentary set of architectural features that most Roman *palaestrae* shared around the end of the 1st century BC. I will then look at how and why the form of *palaestrae* changed during the Roman Imperial period, primarily in Italy. This will help to establish a set of criteria that can be used as a model for the study of *palaestrae* in North Africa.

In chapter three the form of North African *palaestrae* will be analyzed, using the criteria set out in chapter two. Chapter three will include an examination of their size and layout, location within baths, building materials, date of construction, any features they shared, as well as features that were individualized. This discussion will also determine whether North African *palaestrae* were designed differently from those found elsewhere in the Roman world. Finally the decoration of the *palaestra* will be considered. All of this will be accomplished through a re-evaluation of the published reports and site plans.

Chapter four will focus on a discussion of the function of North African *palaestrae*. The evidence used for determining this will be partially based on the layout of North African *palaestrae*, as how they were designed played a significant role in their use. For this I will make use of literary sources. Writers, such as Apuleius, Tertullian and

St. Cyprian, provide valuable information regarding the function of North African *palaestrae*. Inscriptions will provide additional information.

At the end of the thesis are five appendices. Appendix One discusses the meaning of the term *gymnasium*, as it occurs on numerous North African inscriptions. Appendix Two discusses the terminology of *palaestrae* in North Africa. Appendix Three provides a detailed description of each of the known North African *palaestrae*. This Appendix also has a discussion of where *palaestrae* were located, both in urban communities and in the rural areas, along with a look at the reasons behind this distribution. Appendix Four will list the many relevant inscriptions discussed in this thesis, while Appendix Five will list the different artworks from North Africa that show some form of athletic activity. It is hoped that this thesis will encourage future similar studies regarding *palaestrae* in other regions of the Roman world.

Chapter 1: History of 'Greek' Athletics in North Africa

The first organized athletic competition at Rome known to have followed a 'Greek' format took place in 186 BC.[1] After this the frequency of athletic competitions shown at Rome increased during the 1st century BC, as they were given in 80 BC, 58 BC, 55 BC, 53 BC, 46 BC and in 44 BC.[2] When the Imperial period began (late 1st century BC), Augustus attempted to amplify their frequency. He instituted an athletic festival, the *ludi Actia*, to celebrate his victory at Actium in 28 BC, but these were established at Nicopolis in Greece, and not at Rome.[3] He later also endorsed the creation of an athletic festival, the *Sebasta*, at Naples in 2 BC or AD 2.[4] Although Augustus was trying to extend athletic spectacles to both Greek and Roman audiences by carefully integrating aspects of Greek culture into Roman, he did not establish a permanent athletic festival at Rome.[5] Instead it was the emperor Nero who founded the first permanent athletic festival at Rome, the *Neronia*, in AD 60; however it failed to survive Nero's death in AD 69.[6] Although there was no permanent festival at Rome, the continual creation of athletic festivals elsewhere, meant athletics were growing as an acceptable form of Roman entertainment. The validity of this statement is ever apparent, because in AD 86 Greek athletics became fully accepted in the Roman world. The emperor Domitian finally managed to firmly establish a permanent athletic festival at Rome called the *Capitolia*, which survived his death in AD 96.[7] After this it was acceptable to organize and show athletic competitions anywhere in the Roman world.

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[1] Livy, 39.22.1-2. For more information on Greek athletics see S.G. Miller, *Ancient Greek Athletes* (New Haven, 2004), H.A. Harris, *Sport in Greece and Rome* (London, 1972) and N. Gardiner, *Athletics of the Ancient World* (Oxford, 2002). See also L. Robert, Discours d'ouverture, *Actes duVIIe Congrès International d'épigraphie grecque et latine*, Athènes, 1982 (1984) pp.35-45 for more on the spread of Greek games into the Roman world.

[2] 80 BC: Appian, *Roman History* 1.99; 58 BC: Val. Max., 2.4.7; 55 BC: Plutarch, *Pompey* 52.4; Cassius Dio, 39.38.1; Cicero, *Ad Familiares* 7.1; 53 BC: Pliny the Elder, *NH* 36.24.120; 46 BC: Suetonius, *Caesar* 39.3-4; Plutarch, *Caesar* 55; Appian, *Civil War* 2.102; Cassius Dio, 43.22; & 44 BC: Cicero, *Ad Atticum* 16.15.1.

[3] Suetonius, *Augustus* 18.2 & Cassius Dio, 51.1.1-3.

[4] Strabo, 5.4.7, Suetonius, *Augustus* 98.5, and Cassius Dio, 55.10. See also R.M. Geer, in "The Greek Games at Naples" *TAPA* 66 (1935) pp.208-221 and http://www.archaeology.org/online/features/isolympics/. Other emperors attended the *Sebasta* as well. See Suetonius, *Claudius* 11.2, and Suetonius, *Nero* 20.

[5] J. König, *Athletics and Literature in the Roman Empire* (2005) p.231.

[6] Suetonius, *Nero* 12.3-4, Tacitus, *Annals* 14.20, 47 and Cassius Dio, 62.21.

Zahra Newby states that a good example "of the impact made by Greek athletic festivals in the western part of the Roman empire can be seen in North Africa."[8] The existence of *palaestrae* in North Africa demonstrates this impact, because they were important components of Greek athletic culture, providing useful locations for athletic exercise and sometimes competition. In order to demonstrate the connection between *palaestrae* and professional athletics, the evolution and organization of athletics in Roman North Africa during the Imperial period will first be determined, beginning with athletics during the first two centuries AD. This will be followed by an examination of the different ways athletic contests were organized, as well as the structures in which they were held from the late 2nd to mid 3rd centuries AD. Finally the end of athletics in Roman North Africa will be studied.

Although there is very little evidence of athletic competitions occurring in North Africa during the first two centuries AD, the presence of *palaestrae* at Lepcis Magna, Carthage, Volubilis and Thamusida suggest an early athletic culture. Athletics continued to grow, leading to the establishment of permanent athletic festivals in North Africa around the end of the 2nd and beginning of the 3rd centuries AD. It is uncertain why large athletic festivals in North Africa were so late in arriving, but population size was likely a factor. Regardless, after large athletic festivals were established, the evidence suggests that more and more North African towns began to hold smaller athletic spectacles in their communities.

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[7] Suetonius, *Domitian* 4 & 5.
[8] Z. Newby, *Athletics in the Ancient World* (London, 2006) p.84.

The examination of the evidence will show that athletic culture in North Africa was strong at the end of the 2nd to the mid 3rd centuries AD. The large athletic festivals in North Africa were so highly esteemed in the ancient world that athletes from around the Empire would come to participate in them. Athletics were also prominent in the smaller communities of North Africa, as inscriptions, artwork and architecture will all demonstrate. As athletic competitions were such popular spectacles, there must have been facilities constructed for showing them. Although the stadium was one of the typical structures in Greece where athletic competitions occurred, North Africa possessed very few. Large centres, such as Carthage and Caesarea, which both possessed athletic festivals, had them. While other smaller North African communities, if they did not have adequate financial resources, had to use different facilities. One such facility was the bath and its accompanying *palaestra*. This structure played a prominent role in recreational and athletic exercise, and strongly suggests that in some cases athletic competition as well. Finally evidence for athletics significantly declines after the middle of the 3rd century AD, suggesting perhaps that athletic competitions were declining as spectacles. However they had a brief resurgence at the end of the 3rd century AD and although not as popular as before, athletic competitions continued to be held in North Africa until at least the 4th century AD.

Athletics in Roman North Africa

a) Athletics in North Africa before the 3rd century AD

Once the 'Greek' athletic festival, the Capitoline games, was firmly established at Rome in AD 86, other centres in the western half of the Roman Empire began to establish their own festivals.[9] The cities of Massilia (Marseilles) and Vienna (modern Vienne), both established festival cultures sometime in the 2nd century AD.[10] Nowhere is this more evident however, than in North Africa. Khanoussi argues that athletic games did not take a firm hold in North Africa until the beginning of the 3rd century AD. Perhaps one of the reasons for this was population size. As the reorganization of North Africa, including the establishment of thousands of legionary soldiers in the region did not begin until after Augustus came to power, there was not an adequate population size necessary to justify the establishment of a large athletic festival in North Africa.[11] However, this does not imply that smaller athletic competitions were also not organized. Blanchard-Lemée agrees with Khanoussi's idea, pointing out that the beginning of the 3rd century AD is when athletic mosaics become more abundant.[12] Although athletic mosaics began to appear more frequently at this time it did not necessarily mean that athletic competitions had not taken place before this. A variety of explanations could be offered to explain why athletic imagery arrived later than athletic competitions. Many rented living quarters and those who did own their own homes may not have been able to afford to adorn them with athletic imagery. Tastes in art may also have determined the types of artwork found in the homes of the elite. The lack of athletic imagery does not necessarily indicate a lack of interest in athletics.[13]

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[9] Suetonius, *Domitian* 4.4.

[10] Massilia: *IAG*.74, and Vienna: Pliny the Younger, *Epistles* 4.22.7. See also Newby (2006) pp.76-79 for more on these two festivals. Festival culture involves the organization of major festivals, which included musical, theatrical and Greek-style athletic competitions.

[11] See Cassius Dio, 52.42, D.L. Bomgardner, *The Story of the Roman Amphitheatre* (London, 2000) p.121 and A.R. Birley, *Septimius Severus: The African Emperor* (London, 1988) p.7 for the reorganization and population history of North Africa during the Roman Imperial period.

[12] M. Khanoussi, "Jeux athlétiques et pugilat en Afrique romaine" in C. Landes (ed), *Le Stade romain et spectacles* (Lattes, 1994) p.64 and M. Blanchard-Lemée *et al.*, *Mosaics of Roman North Africa: Floor Mosaics from Tunisia* (New York, 1995) p.190.

Early athletic competitions (1st centuries BC & AD) took place in North Africa. Royal games, sponsored by local rulers, took place in other client kingdoms, such as the *Kaisareia* at Caesarea in Israel, which included athletic, musical and theatrical performances.[14] The evidence from North Africa points to early athletic competitions occurring here as well. Graffiti found at Apollonia, in eastern Libya, dating between 29 BC and AD 54, indicates that athletic competition was occurring there at that time. Apollonia also had a stadium, which was a structure typically associated with athletics.[15] A stadium located in the city of Cyrene suggests that there were athletic competitions occurring here as well. There is also evidence from coins that royal games were held at Caesarea in Algeria. Coins found in North Africa have the name of Juba, the legend 'Caesarea' and the image of a wreath (Figure 1.1).[16] Roller suggests that all of this perhaps alludes to some royal games held at Caesarea during the reign of Juba

Figure 1.1: Coins from Caesarea

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[13] Should the lack of erotic imagery indicate a disinterest in sex among the public?

[14] King Herod established the *Kaisareia*: Josephus, *Jewish Antiquities* 15.268-271. See also Robert (1984) pp.35-45 for other examples of Greek games in the Roman world.

[15] A. Davesne, "Le stade d'Apollonia de Cyrénaïque" *LibAnt* 15-16 (1978-79) pp.251-3 does not mention what this graffiti was. See below for the discussion on the structure of the stadium at Apollonia.

[16] J. Mazard, *Corpus Nummorum Numidiae Mauretaniaeque* (Paris, 1955) #'s 226-235 & 293-35.

The image from the bottom of page 16 has been removed due to copyright restrictions. The illustration was Figure 1.1, which was of two coins, both had King Juba on the obverse and a wreath with the word '*Caesarea'* on the reverse. The image can be found in J. Mazard, *Corpus Nummorum Numidiae Mauretaniaeque* (Paris, 1955) p.94, #228.

(27 BC – AD 23). He suggests that the wreath on the coin refers to the victory wreath given at these games.[17] Mazard suggests that some of these coins commemorate specific years of the games held at Caesarea. For example one of the coins shows a crown with the words ANT AN XXX CAIS, which he believes refers to the games held in AD 5/6.[18] Regardless, when spectacles were held at Caesarea they were probably similar to those in Rome. They would have included a variety of different forms of entertainment, such as *venationes* (animal shows), gladiatorial combats and athletic competitions.[19]

There are other indications that there was an interest in athletic competition in North Africa prior to the 3rd century AD. One is that many of the baths with *palaestrae*, such as at the Antonine baths at Carthage and the Hadrianic baths at Lepcis Magna, were constructed during the middle of the 2nd century AD. As will be demonstrated, *palaestrae* were spaces within baths utilized for exercise by non-athletes as well as athletes, who used them for training and possibly even competition. The presence of *palaestrae* before the 3rd century AD reflects an early athletic culture in North Africa.

Another clue indicating that North Africa had an early athletic culture is that athletes from North Africa participated in the athletic spectacles held in Rome. Suetonius mentions boxers from Africa, while Martial mentions a Libyan wrestler participating in athletics at Rome.[20] Whether due to the athletic skills of African athletes or simply because these athletes were a different colour of skin and thus added an exotic element to the competitions, it implies that athletics were already known and practiced in North Africa before the 3rd century AD. Although North Africa did not have a large festival comparable to the *Neronia* or *Capitolia* games at Rome prior to the end of the 2nd century AD, there were athletic competitions exhibited before this.[21] Many centres may have held large festivals that included athletic competitions, but the evidence does not exist to substantiate this. The fact remains that around the beginning of the 3rd century AD the evidence for both large and small athletic competitions in North Africa increases substantially.

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[17] D.W. Roller, *The world of Juba II and Kleopatra Selene: Royal scholarship on Rome's African frontier* (New York, 2003) p.152. Roller (2003) p.152, fn.166 is however still cautious with this suggestion saying that the crown could also represent the *corona civica* (Augustus, *Res Gestae* 34) that Augustus received in 27 BC, or even Juba's own *corona civica*.

[18] Mazard (1955) p.94 #227 does not given the translation for these letters. See also #'s 229-235, which also have the image of a crown and accompanying numbers.

[19] See for example the spectacles at Rome where athletic competitions were only one part of the show. See pp.7-9 above, as well as Livy, 39.22.1-2.

[20] Suetonius, *Caligula* 18: *afrorum pugilum* and Martial, *Epigrams* 5.65: *castigatum Libycae ceroma palaestrae*.

b) Large athletic festivals in Africa

1) The festivals

Roman North Africa boasted at least four large 'Greek' athletic festivals at the beginning of the 3rd century AD. A mosaic from Capsa in southern Tunisia perhaps illustrates one of these festivals (Figure 1.2). The mosaic displays all the different types of athletic competitions and is therefore thought to represent a full festival. Newby argues that since Capsa was not large it is unlikely to have supported such a large festival.[22] It is more probable therefore that whoever commissioned this mosaic attempted to illustrate a festival witnessed at a larger city. The mosaic shows all the different types of athletic competitions typically found in a large festival. There is the pentathlon, which consists of the javelin, discus, jumping, running and wrestling, as well as contests of boxing, the pancration and what appears to be a torch race.[23] Also shown in the mosaic are the prizes awarded, judges, musicians and scenes of the victors being crowned or celebrating.[24] Hugoniot believes that the mosaic represents the Pythian games held at Carthage, but there is nothing in the image to support this idea.[25] It is only viable to suggest that the images on the Capsa mosaic represented a large athletic festival in North Africa.

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[21] *Neronia*: Suetonius, *Nero* 12.3-4, Tacitus, *Annals* 14.20, 47 and Cassius Dio, 62.21. *Capitolia*: Suetonius, *Domitian* 4.4, and Tertullian, *De Spectaculis* 11.1

[22] Z. Newby *Greek Athletics in the Roman Empire: Virtue and Glory* (Oxford, 2005) p.85.

Figure 1.2: Mosaic from Capsa

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[23] See H.A. Harris, *Greek Athletes and Athletics* (Westport, 1979), Miller (2004) and M.B. Poliakoff, *Combat Sports in the Ancient World: Competition, Violence & Culture* (New Haven, 1987) for information on the different types of athletic competitions.

[24] See M. Khanoussi, « *Speculum pugilum et gymnasium*, compte rendue d'un spectacle de jeux athlétiques et de pugilat figure sur une mosaïque de la région de Gafsa » *CRAI* (1988) pp.543-561 for a discussion on the mosaic from Capsa.

[25] C. Hugoniot, *Les Spectacles de l'Afrique Romaine: une culture officielle municipale sous l'Empire romain* (Paris, 2003) p.680.

The image from page 20 has been removed due to copyright restrictions. The illustration was Figure 1.2, which was a mosaic from Capsa. It portrays an athletic festival, with scenes of boxing, running, jumping, the discus, wrestling, the pancration, a torch race, prizes, victors celebrating, judges and musicians. The image can be found in A. Ben Abed Ben Khader, *et alii* (eds), *Image de Pierre: La Tunisie en Mosaïque* (Lavaur, 2003) fig.229.

Although it is not possible to determine which festival is portrayed on the Capsa mosaic, it is known that the Pythian games were held at Carthage. Two inscriptions, one from Ostia, Italy, and the other from Perinthe, Greece, mention the Pythian games specifically. The inscription from Ostia mentions the *Pythia Karthaginis*, while the one from Perinthe gives a list of festivals that an athlete had participated in throughout his career.[26] One of these festivals was the Pythian games at Carthage. Tertullian further corroborates the existence of this festival in a passage of the *Scorpiace*, dated to the first years of the 3rd century AD.

> *Agonas istos, contentiosa sollemnia et superstitiosa certamina Graecorum et religionum et voluptatum, quanta gratia saeculum celebret iam et Afgricae licuit. Adhuc Carthaginem singulae civitates gratulando inquietant donatam Pythico agone post stadii senectutem.*[27]
>
> With what good will the world celebrate those games, the combative festivals and superstitious contests of the Greeks, involving forms both of worship and of pleasure, has now become clear in Africa also. As yet cities, by sending their congratulations severally, annoy Carthage, which was presented with the Pythian game after the [stadium] had attained to an old age.[28]

L. Robert argues that the anonymous *Passio Perpetuae et Felicitatis*, which was written around AD 203, provides another possible clue for the presence of the Pythian games at Carthage.[29] In this work the condemned Christian Perpetua has a vision in which she becomes a male athlete who fights an Egyptian wrestler. She emerges victorious and receives golden apples as a prize.[30] Robert and Salisbury have argued that Perpetua uses the athletic story because she previously witnessed such a contest at the

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[26] Ostia : *CIL*, 14.474 = *ILS*.5233 and Perinthe : *IGR* 1.802: *Πύθια ν Καρθαγέννη*.
[27] Tertullian, *Scorpiace* 6. Taken from Hugoniot (2003) p.662.
[28] Translated by Rev. S. Thelwall from http://www.newadvent.org/fathers/0318.htm.
[29] L. Robert, « Une vision de Perpetue martyre a Carthage en 203 » *CRAI* (1982) p.235.
[30] *Passio Perpetuae et Felicitatis* 10.

Pythian games.[31] Although possible this story provides no evidence for the existence of the Pythian games, only that Perpetua had likely witnessed a wrestling competition.

That the Pythian games took place at Carthage meant that the city obtained the right to hold competitions similar to those of the Pythian games at Delphi where the games first originated.[32] Why Carthage obtained the right to hold these games is not easily answered. Some, such as Barnes and Hugoniot, believe that the emperor Septimius Severus granted Carthage the right to hold them when he visited the region in AD 202.[33] They both also argue that as musical and literary competitions were a part of the Pythian games at Delphi, there is reason to believe they were held at Carthage as well.[34] Barnes goes further, speculating that the Odeum, which was constructed in Carthage around AD 200, may be connected to the existence of the Pythian games as well.[35] Domitian constructed an Odeum when he created the Capitoline games at Rome in order to accommodate the theatrical shows, and Carthage may have done the same.[36] The construction of an Odeum was also a beneficial addition to the city in celebration of acquiring the Pythian games. Its presence enhanced the privilege bestowed on Carthage. If the Pythian games were first held around AD 202 it is uncertain how often they were held afterwards and how long they lasted.

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[31] Robert (1982) p.271 and J.E. Salisbury, *Perpetua's Passion* (London, 1997) p.111.

[32] T.D. Barnes, "Tertullian's Scorpiace" *JThS* 20 (1969) p.125 and König (2005) pp.166 & 170.

[33] Barnes (1969) pp.126-127 and Hugoniot (2003) p.663. Hugoniot argues for this because soon after the date of Septimius Severus' visit, many cities sent their congratulations to Carthage on their obtaining the Pythian games: Tertullian, *Scorpiace* 6.

[34] Barnes (1969) p.125 and Hugoniot (2003) pp.61, 82, 668 & 671. See also J. Fontenrose, "The Cult of Apollo and the Games at Delphi" in W. Raschke (ed), *The Archaeology of the Olympics* (Madison, 1988) pp.121-140 for more information of the Pythian games at Delphi.

[35] Barnes (1969) p.125. Tertullian, *De Resurrectione Carnis* 42: says that the foundations of the Odeum are being layed in Carthage.

[36] Newby (2006) p.32.

Another athletic festival that may have been held at Carthage was the Asklepian games. The name of this festival is mentioned in the Ostian inscription noting the Pythian games, indicating that they were held at Carthage at least once.[37] Further evidence used to support the existence of this athletic festival comes from an end of the 3rd/early 4th century AD mosaic from Althiburos (Figure 1.3).

Figure 1.3: Mosaic from Althiburos

The mosaic shows an object, which Hugoniot, Duval and Robert believe is a crown, a prize often given to victorious athletes.[38] On this crown is the word *Asklepeia*. Therefore it is speculated that the word *Asklepeia* refers to the athletic festival of the same name at Carthage. However, Hugoniot does give a variety of

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[37] *CIL*, 14.474 = *ILS*.5233.

[38] Tertullian, *De Corona* 13.6 and Tertullian, *Ad Martyras* 3.4-5. Tertullian notes the connection between crowns and athletic games in both works and believes that crowns are idolatrous. See Hugoniot (2003) p.665, Robert (1982) pp.229-231, M. Ennaïfer, *Le cité d'Althiburos et l'édifice des Asclepieia* (Tunis, 1976) pp.130-131, and N. Duval « Couronnes agonistiques sur des mosaiques africaines d'Althiburos (Ive siècle) au Cap Bon (Ve siècle?) » *BCTH*, ns, 12-14 (1976-1978) pp.195-216 for a discussion on this mosaic.

The image from page 24 has been removed due to copyright restrictions. The illustration was Figure 1.3, which was a mosaic from Althiburos. It shows a crown with the word '*Asklepeia'* on it. The image can be found in L. Robert, « Une vision de Perpetue martyre a Carthage en 203 » *CRAI* (1982) p.230.

other possibilities for the appearance of *Asklepeia* on this crown. Perhaps the patron is celebrating his victory at these games, or perhaps he is commemorating his generosity as the donor of these games or perhaps it is even a simple devotion to the god Asklepius.[39] Although it is impossible to be certain that the word *Asklepeia* refers to the *Asclepeia Karthagini*, mentioned in the Ostian inscription, it is the most reasonable explanation. Other than this mosaic and the Ostian inscription, however, not much is known about the Asklepian games at Carthage.[40]

Carthage was not the only North African city with permanent athletic festivals. The inscription from Ostia mentions two other festivals that took place at Caesarea in the province of Mauretania. These are called the *Commodeia* and the *Severeia*, in honour of members of the imperial family.[41] Based on the names of these two festivals they were instituted during the reigns of Commodus (AD 180 – 192) and one of the Severans (AD 192 – 235). No details are known about these two festivals. However, archaeological evidence indicates that the Large West Baths, with their large *palaestra* located at the east end, were constructed around the late 2nd or early 3rd centuries AD, roughly coinciding with the creation of these two festivals. Although these baths were constructed primarily for bathing, a secondary purpose for their construction was to accommodate athletes in the *palaestra*. In this facility athletes could train and exercise in preparation for the *Commodeia* and the *Severeia* festivals.[42].

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[39] Hugoniot (2003) p.665, Robert (1982) pp.229-231 and Duval (1976-1978) pp.195-216.

[40] There are very few references to the Asklepian games in the Roman Empire, with mention only at Epidaraus, Philadelphia in Lydia, Laodicee in Phrygia and Ancryra in Galatia. Hugoniot (2003) p.665 and Robert (1982) p.30 n.6. Its presence at Carthage could signify a special privilege in receiving them.

[41] *CIL*, 14.474 = *ILS*.5233. Newby (2006) p.85 and Hugoniot (2003) p.666.

These four festivals were held in only two cities in North Africa. Carthage was the capital of the province of *Africa Proconsularis* as well as the capital of Africa. Therefore it is not surprising that it possessed an athletic festival, even two. Why the city of Caesarea also held two athletic festivals can also be explained. It likely garnered special favour from Rome and the emperors because it was the capital of the province *Mauretania Caesariensis*.[43] The city was one of the largest in North Africa with a population that Grant estimates was around 100,000 at the end of the 2nd century AD. Caesarea was also a harbour town, with naval and auxiliary bases.[44] Finally Caesarea already had an athletic culture, as demonstrated by the Royal games held here in the first century AD. These factors surely influenced the decision to give these cities two large festivals each.

2) Athletic structures

In order to hold large athletic festivals, Carthage and Caesarea both needed facilities large enough to accommodate contestants and spectators. Carthage had an amphitheatre, circus, theatre and an Odeum, while at Caesarea there was a circus, theater/amphitheater and a theatre. Typically these structures housed their own spectacles, such as the theatre for theatrical performances, but they could also hold athletic competitions. For example at Rome the Circus Maximus was frequently used to accommodate athletics in the 1st century BC.[45] However there is no evidence to suggest that athletic competitions were ever held in these structures in North Africa.[46]

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[42] For the discussion and dimensions of the *palaestra* in the Large West Baths at Caesarea see Appendix Three. The large size of this *palaestra* was also mostly certainly due to the population of Caesarea, as it was the capital of *Mauretania Caesarensis*.

[43] Pliny the Elder, *NH* 5.20. The city became *colonia Claudia Caesarea* after Claudius annexed the region in 40 AD.

[44] M. Grant, *A Guide to the Ancient World* (New York, 1986) p.133.

If there is no evidence to suggest that athletic competitions were ever held in any of these structures in Carthage and Caesarea, then where did they occur? Open fields were obvious locations because they were ideally suited for many of the athletic competitions, such as running, the javelin and the discus. In Italy, during the 1st century BC, Pompey and Caesar both used the open field of the Campus Martius to hold their athletic competitions.[47] Athletes, as well as many Roman youths, also frequented this area and engaged in many different types of activities.[48] Therefore it is easy to believe that open fields in North Africa were similarly used for both athletic exercise and competition, even if there is no evidence to show that they did.

The gymnasium was used for holding athletic competitions in the Greek world but its presence was limited in the west.[49] There were a few constructed in Italy, as Suetonius

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[45] Cicero, *De Legibus* 2.38.

[46] The late Vandal poet Luxorius (late 5th – early 6th century AD) does relate in one of his poems (*Epigrams*.87) an incident he witnessed about a youth who leapt over a podium that was placed in the amphitheatre at Carthage. Although Rosenblum says that this youth was an athlete, there is nothing in this poem to suggest that this is actually the case. Even if the youth was an athlete, Luxorius is likely describing a performance rather than a competition that was a part of an athletic festival. The incident also occurs at a much later time when athletics in North Africa were likely very different due to the Vandal occupation. See M. Rosenblum, *Luxorius: A Latin Poet Among the Vandals* (New York, 1961) p.248.

[47] H.M. Lee, "Venues for Greek Athletics in Rome" in S.K. Dickison and J.P. Hallett (eds.) *Rome and Her Monuments: Essays on the City and Literature of Rome in Honor of Katherine Geffcken* (Wauconda, 2000) pp.220-222. See also K.L. Gleason, "Porticus Pompeiana: a new perspective on the first public park of Ancient Rome" *Journal of Garden History* 14 (1994) pp.13-27 for a discussion on the appearance of the Campus Martius during the time of Pompey. Augustus also organized athletic competitions in the Campus Martius: Suetonius, *Augustus* 43.

[48] Strabo, 5.236. E. Eyben, *Restless Youth in Ancient Rome* (London, 1993) p.81 and D. White, "Roman Athletics" *Expedition* 27.2 (1985) pp.32-33. See also A. Bouet, « 'Campus et Juventus' dans les agglomérations secondaires des provinces occidentales » *REA* 101 (1999) pp.461-486 for more on the *campus* found in the western provinces of the Roman Empire.

[49] See J. Delorme, *Gymnasion: étude sur les monuments consacres a l'éducation en Grèce* (des origines a l'Empire romain) (Paris, 1960), S.L. Glass, "The Greek gymnasium. Some problems" in W. Raschke (ed),

(c. AD 69/75 – after 130) notes Nero attending the gymnasium in Naples in order to watch athletic competitions (*statimque in gymnasium progressus certantis athletas effusissimo studio spectavit*).[50] This was a structure certainly used for holding athletic competitions in Greece and sometimes in Italy, but there is no evidence for the presence of a gymnasium in either Carthage or Caesarea.

Athletic competitions in the Greek world were also held in *stadia* and the major athletic centers, such as at Olympia, all had these structures.[51] Domitian constructed a stadium at Rome, for his new festival, the Capitoline games.[52] One should therefore expect to find *stadia* in North African Greek colonies, such as Apollonia and Cyrene. The city of Apollonia in the province of Cyrenaica has evidence to suggest the presence of a small stadium, constructed in the 2nd century BC and capable of holding about 1000 people.[53] Cyrene, the capital of Cyrenaica, also had a stadium, which measured 58 m in length. Although this structure had one open end, it is often identified as a circus or hippodrome.[54] Humphrey argues that, despite its short length, this stadium was still long enough to hold equestrian events.[55]

This shows that the Greek colonies in North Africa had *stadia*, but what of the other North African cities? One would not expect to find such a large structure in smaller towns, but surprisingly there is no archaeological evidence for *stadia* in any of the larger

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The Archaeology of the Olympics (Madison, 1988) pp.155-173 and S.L. Glass, *Plaistra and gymnasium in Greek architecture, Diss.* (Philadelphia, 1967) for discussion on the gymnasium in the Greek world.

[50] Suetonius, *Nero* 40. Nero even built one, along with a bath, when he inaugurated the *Neronia*: Suetonius, *Nero*.12. Tacitus, *Annales* 14.47. It later burned down in AD 63, after being struck by lightning: Tacitus, *Annales* 15.22.

[51] See for example L. Drees, *Olympia: Gods, Artists and Athletes* (New York, 1968) and S.G. Miller, *Excavations at Nemea II: The Early Hellenistic Stadium* (Berkley, 2001).

[52] Newby (2006) p.32. See also Miller (2004) p.203 and P. Virgili, "Le stade de Domitien" in Landes (ed) *Le stade romain et ses spectacles* (Lattes, 1994) pp.107-119 regarding Domitian's stadium at Rome.

[53] Davesne (1978-79) pp. 251-3. See Davesne for the measurements of this stadium.

[54] R. Goodchild, *Cyrene and Apollonia: An Historical Guide* (Tripoli, 1993) pp.71-73.

[55] J.H. Humphrey, " 'Amphitheatrical' Hippo-Stadia" in *Caesarea Maritimia: A Retrospective after Two Millennia*, ed. A. Raban and K. Holum (New York, 1996) p.124.

cities of North Africa either. Despite this, there was most certainly a stadium at Carthage. Tertullian notes, in his treatise *De Spectaculis*, that athletic competitions took place in the stadium, but Hugoniot argues that Tertullian refers rather to a stadium at Rome than at Carthage.[56] However, this treatise was likely primarily written for a North African audience and when Tertullian goes into specific detail regarding the appearance of the circus he assuredly describes the one at Carthage, not at Rome.[57] Therefore the stadium he mentions is also probably at Carthage. Tertullian makes further mention of the stadium at Carthage in another of his works. He says that cities annoy Carthage, because they send many envoys to offer it congratulations after receiving the Pythian games, and this after the stadium had attained an old age.[58] St. Cyprian, a bishop of Carthage (died AD 258) also makes mention of a stadium saying:

> *Neque enim idoneus potest esse miles ad bellum qui non exercitatus prius in campo fuerit, aut qui agonisticam coronam quaerit adipisci in stadio coronabitur, nisi usum et peritiam virium ante meditetur.*[59]
>
> For he cannot be a soldier fit for war who has not first been trained in the field, nor will he who seeks to obtain the contestant's crown be crowned in the stadium, unless he first gives thought to the practice and skill of his powers.[60]

Pontius (mid 3rd century AD), a deacon, also mentions a stadium at Carthage when he relates the life of Cyprian. Pontius writes that Cyprian, being led to his execution, passed by the stadium.[61] Based on these references it is plausible to believe that Carthage did have a stadium, even though nothing remains archaeologically.[62]

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[56] Tertullian, *De Spectaculis* 11.3, 20.5, 21.3 and 30.7. Hugoniot (2003) p.62.

[57] Tertullian, *De Spectaculis* 8.1-7. Hugoniot (2003) p.62 believes that Tertullian is describing the Circus Maximus at Rome. If Tertullian were describing the circus at Rome, he likely had seen it firsthand. Of course he may be describing it using another written source. However, there is the question on whether Tertullian was ever at Rome. For a short discussion on this question see T.D. Barnes, *Tertullian: A Historical and Literary Study* (Oxford, 1971) pp.243-245.

[58] Tertullian, *Scorpiace* 6. For the debate on the meaning of this passage see Hugoniot (2003) p.61 and Robert (1982) p.234. Tertullian also mentions a stadium in *Ad Martyrs* 3.5.

[59] Cyprian, *Epistola ad Fortunatum de Exhortatione Martyrii* 2.

[60] Translation taken from http://www.ewtn.com/library/SOURCES/MARTYRDM.TXT.

There is even less evidence for a stadium at Caesarea. There is nothing here that could be positively described as a stadium, but there is a structure capable of holding athletic competitions. It is an amphitheatre-like structure constructed between 25 – 14 BC, during the reign of King Juba II (26 BC – AD 23). Having lived at Rome, Juba II was aware of the artistic and building program of Augustus, which included the construction of a new permanent theatre in 29 BC.[63] This may explain why Juba's structure was a rectangle with semicircular ends, similar to the *cavea* (seating area) of a theatre.[64] However Hugoniot feels that overall this structure was a mixture of an amphitheatre and stadium, suggesting that Juba, or his architect, was familiar with the appearance of both.[65] Though oddly shaped, there is nothing to indicate that Juba II purposely mixed the architecture of a stadium with a theatre. In any case this structure was very large, measuring 101 m by 44 m, and therefore quite suitable for holding both gladiatorial combats and athletic competitions.[66]

The only other areas capable of holding athletics were *palaestrae*, which both Carthage and Caesarea possessed. Attached to baths, *palaestrae* were spacious and accommodating for athletic exercise, and although not large enough to accommodate large athletic competitions, could very possibly accommodate smaller ones. Tertullian notes that athletes, in their desire to win a crown, practiced in the *palaestra*.[67] Baths also frequently had images of athletes suggesting a strong connection between baths, *palaestrae* and athletics. The form and function of the *palaestra* in North Africa will be discussed in further detail in chapters 3 and 4 respectively below, demonstrating that they played an important role in the realm of athletics and recreational exercise.

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[61] Pontius, *De Vita Cypriani* 16: *Eundi autem interfuit transitus stadii.*

[62] St. Augustine mentions a stadium in many of his works, but Hugoniot (2003) p.63 rightly believes that he is speaking about a stadium metaphorically, as it pertains to the life of a Christian. See Hugoniot (2003) p.63, ft.136 for an extensive list of St. Augustine's mention of a stadium.

[63] Juba II also commissioned the construction of a theatre in Caesarea around the same time as the amphitheatre-like structure. Although the theatre was built into the side of the hill Roller argues that it conforms to the Vitruvian rules of construction. Roller (2003) pp.122-123.

[64] Roller (2003) p.124.

[65] Hugoniot (2003) pp.62 & 666.

[66] Measurements come from P. Leveau, *Caesarea de Maurétania : une ville romaine et ses campagnes*, in ÉFR 70 (Rome, 1984) p.38 and Bomgardner (2000) pp.151-152. Leveau (1984) p.39, speculates that the structure was continually used until the 5th century AD.

c) Smaller competitions in Africa

1) The small competitions

Every North African city needed the support of prominent men in order to receive concessions from the Emperor. Although Carthage and Caesarea were capital cities of their respective provinces and therefore acquired large athletic festivals, they obtained other concessions, including smaller spectacles, from their prominent men.[68] If cities did not have a senator or someone with high political standing, they would have to rely on local prominent men to obtain privileges.[69] The responsibility of giving these privileges was usually placed on individual sponsors in the community, such as *flamines* (priests), *aediles* (government official) and other magistrates. For example an inscription from Thuburnica mentions that the *aedile* C. Sallustius Felix financed a major embellishment to the amphitheatre around AD 268.[70] Men such as Sallustius provided such benefits because they could afford them and because it was also a way to promote personal prestige within the community.[71] Of course the costs incurred varied according to a number of factors including the type of structure constructed, the materials used, the size of the building and other factors not recorded. For instance the theatre at Calama cost 400,000 sesterces, while the baths at Gibba cost 100,000 sesterces.[72]

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[67] Tertullian, *Ad Martyrs* 3.5: *Nos aeternam consecuturi carcerem nobis pro palaestra interpretamur, ut ad stadium tribunalis bene exercitati incommodis omnibus producamur, quia virtus duritia exstruitur, mollitia vero destruitur.*

[68] *AE*, 1910.78 = *ILA*.390 = *ILS*.9406: mentions how the local magistrate at Carthage, Q. Voltedius Optatus Aurelianus, paid 200,000 sesterces in order to exhibit a four-day spectacle, which included a *venatio* (animal hunt) and gladiatorial contests, while *ILA*.400: mentions the performance of a two-day *venatio* and gladiatorial contest, also given at Carthage.

[69] R.P. Duncan-Jones, "Patronage and city privileges: the case of Giufi" *EpSt* 9 (1972) pp.15-16.

Buildings were not the only benefactions given to cities. Often prominent citizens of a community organized athletic competitions.[73] There is only one inscription from North Africa that specifically mentions the donation of an athletic spectacle (*spectaculum athletarum*) and it comes from Limisa, Tunisia.[74] Other than this, there are over fifty inscriptions in North Africa, dating from the middle of the 2nd century to the end of the 3rd century AD, which mention the donation of a *gymnasium* (gymnastic oil). Although translated as gymnastic oil, it was used for some type of unspecified athletic activity, which could include both exercise and competition.[75] For example one benefactor gave a meal, gymnastic oils, and theatrical displays (*epulum et gymnasia et ludos scaenicos*

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[70] *CIL*, 8.26582 = *AÉ*, 1981.17. See P.I. Wilkins, "Amphitheatres and Private Munificence in Roman Africa: A New Text from Thuburnica" *ZPE* 75 (1988) pp.215-221 for a discussion on this inscription. See also R.P. Duncan-Jones, *The Economy of the Roman Empire: Quantitative Studies* (Cambridge, 1974), *Ibid.*, (1972), *Ibid.*, "An epigraphic survey of costs in Roman Italy" *PBSR* 33 (1965) pp.189-306, *Ibid.*, "Costs and outlays and *summae honorariae* from Roman Africa" *PBSR* 30 (1962) pp.47-115 for more examples of private munificence in North Africa.

[71] A. Farrington, "Olympic Victors and the Popularity of the Olympic Games in the Imperial Period" *Tyche* 12 (1997) p.34. D. Johnston, "Munificence and Municipia. Bequests to Towns in Classical Roman Law" *JRS* 75 (1985) p.105 states that power, posthumous glory and civic regard were the primary reasons for munificence.

[72] Calama: *ILAlg*.1.286 and Gibba: *CIL*, 8.18547-8.

[73] C. Holleran, "The development of public entertainment venues in Rome and Italy" in *Bread and Circuses. Eurgetism and municipal patronage in Roman Italy* (London, 2003) p.50 notes that games were also significant in political terms because they allowed the population of a city to gain an audience with the *editor*.

[74] KSL.183, & Z. Benzina Ben Abdallah, « Catalogue des Inscriptions Latines Inédites de Limisa (Ksar Lemsa) » *AntAfr* 40-41 (2004-2005) pp.124-125. See Appendix Four for the full inscription.

[75] See the discussion on the meaning of the word *gymnasium* in Appendix One, as well as the list of *gymnasium* inscriptions from North Africa in Appendix Four.

dedit) to the community of Sutunurca in AD 162-163.[76] Here the "gymnastic oils" refer to some unspecified athletic competition in which oils were supplied to those participating. Although this donor also mentions the sum of 3000 sesterces (HS) that he gave in order to pay for these gifts, it is impossible to determine how it was divided among all of the benefactions.[77] There is also the problem of not knowing what type of athletic competition was given, as each contest may have incurred a different cost. At any rate, from the numerous *gymnasium* inscriptions, it is clear that local North African citizens organized small athletic competitions in their communities.

These small athletic competitions are illustrated on several works of art found in North Africa. Mosaics provide one medium for images of athletes and they were typically placed within baths; examples include the baths at Gigthis, Carthage, Capsa, Thaenae, Thuburbo Maius, Thapsus and Henchir Herrich in Tunisia, Caesarea and Theveste in Algeria, and Silin in Libya.[78] On each of these mosaics athletes appear either as portraits or engaged in athletic activity.[79] Although Newby notes a connection between baths and athletics, baths were not the only buildings to contain athletic imagery.[80] Images also occasionally decorate private residences, such as at Utica.[81] Sculpture, sculptural relief, pottery and lamps also carry images of athletes and athletic scenes.[82] The different types of artwork portraying athletic activity, coupled with the evidence from inscriptions, hint at the widespread popularization of athletics in North Africa. Small athletic competitions provided entertainment for the populace and put the benefactors in good position within the community.

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[76] *AÉ*, 1909.160 = *ILAfr*.303.
[77] The mention of money spent on benefactions occurs on other *gymnasium* inscriptions, however, like the one from Sutunurca, there is no way to determine how much of the total was spent on each benefaction. See for example *gymnasium* inscriptions nos. 5, 8-10, 12, 17, 19, 22-25, 27, 30-32, 40 & 42 in Appendix Four.
[78] See Appendix Five for more information on these mosaics.
[79] Athletes appearing as portraits are identified as such either by their facial features (cauliflower ears, broken nose, etc.), their hairstyle (*cirrus*), or the objects that accompany them (palm branches, javelin, boxing gloves, etc.).
[80] Newby (2006) p.45.
[81] The provenance of some of the mosaics portraying athletes is unknown. See Appendix Five for examples.
[82] For the sculptural relief: G. Picard, « Un bas-relief agonistique à Mactar » *BCTH* n.s. 18b 1982 (1988) pp.95-99. For sculpture: M.A. Lezine et al., "Observations sur la ruine des Thermes d'Antonin à Carthage" *CRAI* (1956) p.426 and K.M.D. Dunbabin, *The Mosaics of Roman North Africa: Studies in Iconography*

Although small athletic competitions were frequently given in North African communities, some athletic shows were single event contests. One was the boxing match, which suggests that this type of competition was more popular than some other athletic contests. Nine inscriptions from North Africa mention boxing competitions given as single event spectacles.[83] Where there is information available, boxing matches seem to be given for a variety of different reasons. For example at Ziqua, Tunisia, a boxing match was given to celebrate the erection of an imperial statue.[84] At Gori, Tunisia, a boxing match was given in order to celebrate the birthday of a magistrate's son.[85] Boxing scenes are typically shown in art as well. Mosaics from the villa at Silin (Figure 1.4), the Large West Baths at Caesarea, the Thermes du Labyrinthe at Thuburbo Maius (Figure 1.5), and the baths at Thapsus (Figure 1.6) all portray images of boxers and no other type of athlete. Images of boxers are also portrayed on many lamps.[86] One reason for boxing's popularity was that it was violent. This is evident in the Capsa and Thuburbo mosaics

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and Patronage (Oxford, 1978) pp.215-216. For the pottery: P. Gauckler, & F. Du Coudray La Blanchere, *Cataloque du Musee Alaoui* (Paris, 1897) p.236. For the lamps: Gauckler & Du Coudray La Blanchere, (1897) pp.169-170, J. Bussière, *Lampes antiques d'Algérie*, Monographies *instrumentum* 16 (Montagnac, 2000) and J. Deneauve, *Lampes de Carthage*, (Paris, 1969).

[83] Hr. Esch-Schoor (Hr Chaâr) (Maragui Sara): *ILS*.5072 = *CIL*, 8.11998, Tuccabor: *CIL*, 8.1323 (14855) = *ILTun*.1288, Ziqua: *ILS*.5074 = *CIL*, 8.895 (12425) = *ILTun*.770, Gori: *CIL*, 8.12421 = *ILS*.5071 = *AE* 1941.157 = *ILTun*.766, Ziqua: *CIL*, 8.24056 = *CIL*, 8.12426, Gori: *ILTun*.769 = *CIL*, 8.762, Unknown: *AÉ*.1988.1134, Hr. Draa-el-Gamra: *ILS*.5071 and Membressa: *CIL*, 8.25836 = *ILS*.8926. See C. Briand-Ponsart, "Une évergésie modeste: les combats de boxe dans quelques cités d'Afrique proconsulaire pendant l'"Empire" *AntAfr* 35 (1999) pp.135-149 for a more in-depth discussion on seven of these inscriptions.

[84] *ILS*.5074 = *CIL*, 8.895 (12425) = *ILTun*.770.

[85] *CIL*, 8.12421 = *ILS*.5071 = *AE* 1941.157 = *ILTun*.766. See Briand-Ponsart (1999) p.142 for some of the other reasons why boxing matches were given.

[86] See Bussière (2000) #'s 37, 38, 258, 259, 538, 539 & 540, Gauckler & Du Coudray La Blanchere, (1897) Lamps #209, and J. Deneauve, *Lampes de Carthage*, (Paris, 1969) #'s 331 & 674 for the lamps.

(Figures 1.2 and 1.5), where blood spills out of the head of one of the boxers. Tertullian also notes the scars typically seen on the face of a boxer.[87] This violence likely appealed to North Africans and that is why boxing was given as a spectacle by itself.

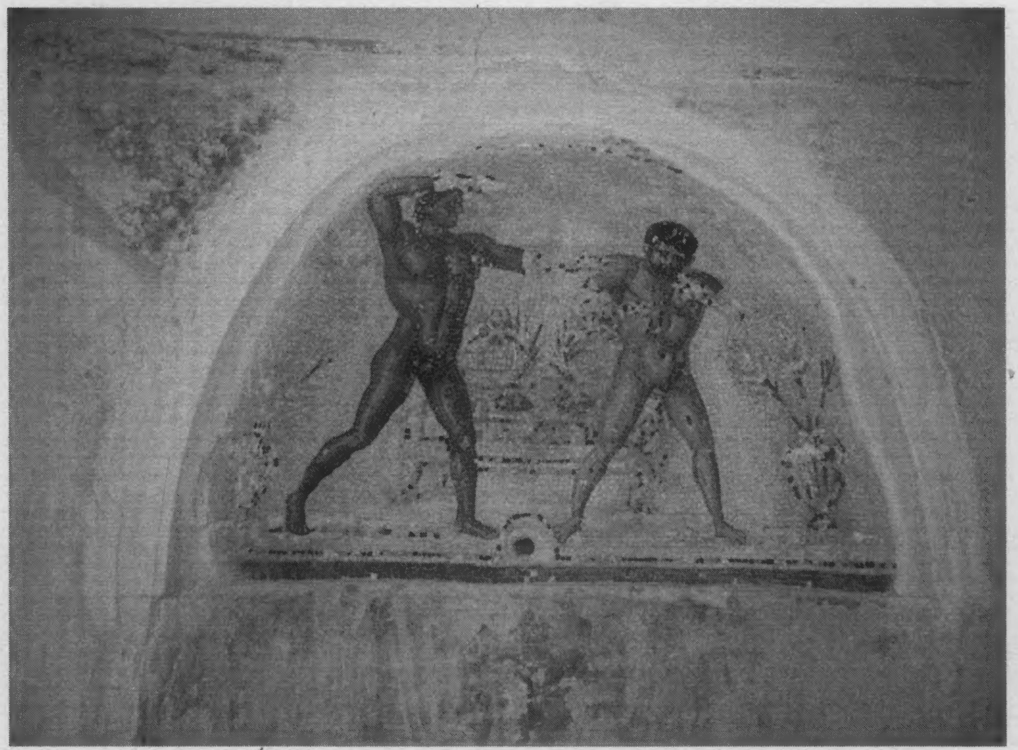

Figure 1.4: Mosaic from Silin

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[87] Tertullian, *De Spectaculis* 23.7.

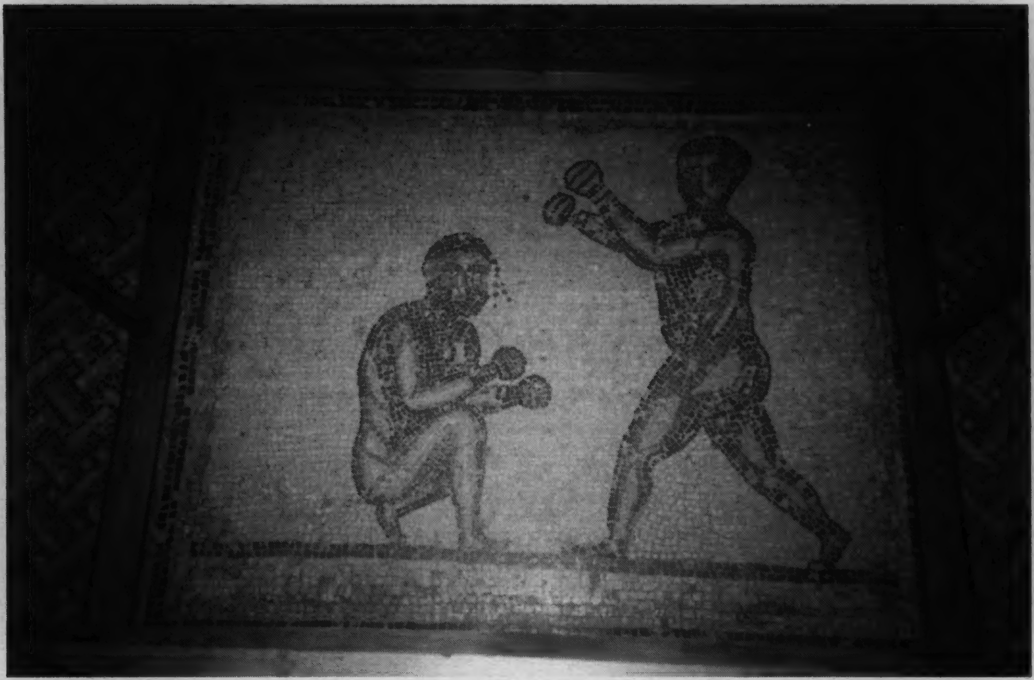

Figure 1.5: Mosaic from Thuburbo Maius

Figure 1.6: Mosaic from Thapsus

The image from the bottom of page 37 has been removed due to copyright restrictions. The illustration was Figure 1.6, which was a mosaic from Thapsus. It shows the head of a boxer, who wears a necklace and a *cirrus* (topknot). There is also a palm leaf. The image can be found in A. Ben Abed Ben Khader, *et alii* (eds), *Image de Pierre: La Tunisie en mosaïque* (Lavaur, 2003) fig.312.

Another reason to possibly explain why boxing matches were sometimes given alone could be their high cost. This varied depending on the number of days the competition lasted, the number of participants, prizes awarded and other factors not recorded. For example the boxing matches at Hr. Esch-Schoor cost the sponsor 2,000 sesterces (HS), while the boxing matches at Tuccabor cost 16,000 (HS).[88] One wonders how this money was distributed. Certainly a portion of the money was for the boxers, because they were either hired to perform or would receive prizes in the form of money, crowns or branches. The boxing mosaic from Silin (Figure 1.4) shows a table holding wreaths and bags of money. As there are two of each item and only two boxers, the scene suggests that both will receive prizes regardless of the outcome.[89] Both inscriptions above also mention other benefactions included, such as theatre shows and meals. This meant that a portion of the money was needed for the costs of these gifts as well. Due to all of these factors it is very difficult to ascertain how much one boxing match would cost a sponsor.

There is much evidence to show that many North Africans became boxers. Suetonius mentions boxers coming from Africa to perform at Rome, while the North African writer Tertullian was able to describe the typical appearance of boxers because he witnessed them first hand.[90] A late 3rd century AD stele from Cyrene shows a local boxer, named Antonianos, who was bald and beardless, holding a palm in his left hand.[91]

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[88] (Hr. Esch-Schoor): *ILS*.5072 = *CIL*, 8.11998 and Tuccabor: *CIL*, 8.1323 (14855) = *ILTun*.1288.

[89] The possibility exists that other athletic competitions would occur between these two men but the image only shows the boxing contest.

[90] Suetonius, *Caligula* 18, and Tertullian, *De Spectaculis* 23.7.

[91] F. Baratte, "Les concours du stade dans la sculpture romaine" in Landes (ed) *Le stade romain et ses spectacles* (Lattes, 1994) p.124 and F. Chamoux, « Une stèle funéraire de Cyrène » *BSNAF* (1988) pp.113-4. For the appearances of athletes during the Imperial period see B. Gassowska, "*Cirrus in vertice* – One of the problems in Roman Athlete Iconography" in M.L. Bernhard et al. *Melanges offertes a Kazimierz*

The contestant on the right from the mosaic at Silin (Figure 1.4) has much darker skin than his opponent, suggesting perhaps African ethnicity. The profile of a boxer in a late 3rd to early 4th century AD mosaic (Figure 1.6) found in the *frigidarium* (cold room) of a bath at Thapsus also has Negroid facial characteristics. Ben Lazreg believes that this individual was an African champion.[92] Although all of this demonstrates that North Africans were often participants in boxing matches, boxers did travel from other regions to participate in North African competitions as well.[93]

Boxing matches are the only athletic competitions singled out on inscriptions, suggesting that they were a more popular spectacle than the other athletic contests. This idea is strengthened by the fact that they are also frequently portrayed in art. However boxing matches were not the only athletic competition portrayed alone. Mosaics showing only scenes of wrestling are also often found. Two mosaics from Gigthis (Figures 1.7 and 1.8), one from Thaenae (Figure 1.9), and one from Utica (Figure 1.10) show wrestlers in various stages of combat. In addition, a sculptural relief from Mactaris shows two pairs of wrestlers engaged in combat.[94] Also, like boxing, North Africans were active participants in this sport. Martial (late 1st century AD) describes a wrestler of Libyan descent performing at Rome, while Apuleius (1st century AD) makes a few references to wrestlers in the *Apologia*.[95] A wrestler on the lowest panel from the mosaic in Thaenae has skin quite a bit darker than the rest of the combatants, perhaps suggesting that he was African.

Michalowski (Warsaw, 1966) pp.421-427 and J-P. Thuillier, « Le cirrus et la barbe. Questions d'iconographie athlétiques romaine » *MEFRA* 110 (1998) pp.351-380.

[92] N. Ben Lazreg "Les decouvertes recenes dans deux villes portuaires du moyen Byzacium" in A. Ben Abed Ben Khader et alii (eds). *Image de Pierre: La Tunisie en Mosaïque* (Lavaur, 2003) p.492. He believes this athlete is a champion because of the palm-like object shown with him.

[93] See for instance the athletes from Ostia, Italy (*CIL*, 14.474 = *ILS*.5233), and Perinthe, Greece (*IGR*, 1.802), who traveled to North Africa to participate in the athletic festivals at Carthage and Caesarea.

[94] See Appendix Three in the artworks section at Mactaris for more information on this sculptural relief.

[95] Martial, *Epigrams* 5.65, Apuleius, *Apologia* 48.2 & 63.7.

Newby suggests that the image of a wrestler on a mosaic from ancient Vienna has African features.[96] All this suggests that despite not being mentioned on inscriptions, wrestling was a popular sport in North Africa. It also suggests that wrestling competitions were often stand-alone events.

Figure 1.7: Mosaic from Gigthis

Figure 1.8: Mosaic from Gigthis

Figure 1.9: Mosaic from Thaenae

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[96] Newby (2005) p.81.

The information from page 41 has been removed due to copyright restrictions. The illustration was Figure 1.7, which was a mosaic from Gigthis. It shows a pair of wrestlers engaged in combat. The image can be found in A. Ben Abed Ben Khader, *et alii* (eds), *Image de Pierre: La Tunisie en mosaïque* (Lavaur, 2003) fig.227.

The information from page 41 has been removed due to copyright restrictions. The illustration was Figure 1.8, which was a mosaic from Gigthis. It shows a pair of wrestlers engaged in combat. The image can be found in A. Ben Abed Ben Khader, *et alii* (eds), *Image de Pierre: La Tunisie en mosaïque* (Lavaur, 2003) fig.228.

The information from page 41 has been removed due to copyright restrictions. The illustration was Figure 1.9, which was a mosaic from Thaenae. It shows three levels, with the top level containing a table holding two crowns and a palm leaf to its side. The second level shows two scenes, with a pair of wrestlers engaged in combat on the left and another pair of athletes standing on the right. The third level contains another two scenes. Both show a pair of wrestlers engaged in combat. The image can be found in A. Ben Abed Ben Khader, *et alii* (eds), *Image de Pierre: La Tunisie en mosaïque* (Lavaur, 2003) fig.226.

Figure 1.10: Mosaic from Utica

In the great majority of inscriptions involving donations of *gymnasia* other types of gifts are listed as well. Most often this is a banquet (*epulum*), but almost as frequently theatre shows (*ludos scaenicos*) are donated. The meal was typically given for the elite, because it was an easy way to please the members of the upper class; it was normal practice for the elite to congregate and have dinner together anyway.[97] It is unclear, though, why theatre shows were normally associated with giving a *gymnasium*. The Pythian games at Carthage had musical and theatrical plays alongside athletic competitions, so perhaps these prominent locals were attempting to emulate this with their smaller spectacles. If this was the case, it further supports the idea that the term *gymnasium* implied that the gymnastic oil was meant for athletic competitions.

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[97] See K.M.D. Dunbabin, "Convivial spaces: Dining and entertainment in the Roman villa" *JRA* 9 (1996) pp.66-80 for a closer discussion on dining.

The information from the top of page 45 has been removed due to copyright restrictions. The illustration was Figure 1.10, which was a mosaic from Utica. It shows two pairs of wrestlers engaged in combat with a table placed between both pairs, which holds palm leaves and a crown. The image can be found in A. Ben Abed Ben Khader, *et alii* (eds), *Image de Pierre: La Tunisie en mosaïque* (Lavaur, 2003) fig.223.

2) Athletic facilities

As smaller athletic competitions were often given to North African communities, one must wonder where they were held. *Stadia* were rarely attested and, in fact, only major festival cities, such as Carthage and Caesarea, and North African Greek colonies, such as Cyrene and Apollonia, had these. Hugoniot believes that the cost of constructing a stadium was too great for many smaller communities.[98] Therefore other options were required. Open fields were obvious choices, even if there is no evidence to prove this conclusively in North Africa.[99] Other entertainment structures, such as amphitheatres, theatres and circuses, could also hold athletic competitions but not all towns had the luxury of these structures. Suetonius tells us that Augustus organized foot races in the circus at Rome; while the late writer John Malalas (6th century AD) noted that the theatre in Antioch, Turkey, was used to hold wrestling contests.[100] Although it is a distinct possibility that this occurred in North Africa as well, there is no evidence to support it. Other than these entertainment facilities, there was one other structure used to hold physical activity, which included recreational and athletic exercise, and very possibly athletic competition. In small towns, baths, with their associated *palaestrae*, provide a possible venue for athletics. *Palaestrae* were always attached to baths and it will be demonstrated how *palaestrae* were ideal settings for athletic exercise, and sometimes competitions, in small towns.

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[98] Hugoniot (2003) p.675.

[99] See page 20 above for evidence demonstrating that athletic competitions occurred in open spaces.

[100] Suetonius, *Augustus*.43 and Jean Malalas, *Chronographia*, p.290, 13 sq, from Hugoniot (2003) p.675, n.53.

d) End of athletics in North Africa

The Pythian festival at Carthage and the Commodian and Severan festivals at Caesarea were all established between the end of the 2nd and the early 3rd centuries AD. When the Asklepian games were instituted at Carthage is unclear, but the date of the Althiburos mosaic would suggest that they existed by the end of the 3rd century AD. If it was established at the same time as the other festivals, it meant this festival existed for at least 100 years. When the big athletic festivals in North Africa ended is not clear, but Khanoussi hypothesizes that all the major athletic festivals were gone by the end of the 4th century AD.[101] This idea is supported by the fact that in AD 376 the proconsul of Africa requested from the emperors that they be allowed to restore athletic competitions. The emperors replied saying:

> *Imppp(eratores) Valens, Gr(atianus) et Val(entini)anus AAA(ugusti) ad Hesperium proc(onsulem) Afric(ae). Non invidemus, sed potius cohortamur amplectenda felicis populi studia, gymnici ut agonis spectacula reformentur. Verumtamen cum primates viri populi studiis ac voluptatibus grati esse cupiant, promptius permittimus, ut integra sit voluptas, quae volentium celbretur inpensis. Dat. VI Id. Mart. Trev(iris) Valente V et Val(entini)ano AA(gustibus) conss(ulibus).*[102]
>
> The emperors Valens, Gratian and Valentinian Augustus to Hesperius proconsul of Africa. We do not refuse, but rather encourage the satisfaction of the tastes of people by restoring the spectacles of the gymnastic contests. However, since the leading men wish to be pleasant with the tastes and the pleasures of the people, we authorize it readily, so that the rejoicing organized with the expenses of the volunteers is complete. Given in Trier on April 24th, 381, under the 5th consulate of Gratian and that of Valentinian Augustus.[103]

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[101] Khanoussi (1994) p.64.

[102] *Cth*, 15.7.3. From Hugoniot (2003) p.672, n.47.

[103] Translated by Hugoniot (2003) p.672.

This suggests that athletic festivals, at least wherever the proconsul was stationed, had ceased by AD 376. Whether they were actually abolished or just no longer held every few years is hard to determine. North Africans missed athletic competitions, however, because as the inscription shows, they demanded their return. Hugoniot believes that the restoration of athletic festivals in Carthage is reflected in the restoration of the Odeum at Carthage, which was done sometime between AD 383 and 395.[104] Its restoration implies a return of perhaps the Pythian games, as the Odeum previously housed the musical contests associated with this festival.[105] This of course is simply conjecture as the Odeum may have simply been falling apart and therefore needed to be restored.

How long athletic festivals continued after AD 376 is unknown but by the 5th century AD they were likely no longer organized events held every few years.[106] Hugoniot argues that boxing played a role in the ultimate demise of large athletic festivals.[107] If the North Africans especially desired to see boxing then the other athletic competitions may have become less frequent. Boxing contests were easily integrated into other shows, such as gladiatorial games, thus freeing patrons from spending money on any other types of athletic competitions. Mosaics depicting scenes of boxing continue in the 3rd and 4th centuries AD suggesting a sustained enthusiasm for this contest. It is interesting to note that wrestling was also continually portrayed on mosaics, suggesting it too maintained its popularity in North Africa.[108] That athletics persist as a theme in mosaic art indicates the continuing presence of an athletic culture in North Africa, despite the demise of large athletic festivals. Many of these mosaics are still found in baths, illustrating the continuing connection between athletics and baths. Another possibility is that the elite enjoyed showing off their Greek tastes and therefore used athletic imagery in their homes and other buildings they owned to illustrate this.[109] In any case the late appearance of athletics in art and the request to re-institute them in the region reinforces the impression that North Africans were very passionate for athletic competition.

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[104] *CIL*, 8.24590.

[105] Hugoniot (2003) pp.672-4. Hugoniot (2003) pp.668 & 674-675, also argues that the passage from St. Augustine, *Conf.*4.2.3, where Augustine says that he participated in a theatrical contest at Carthage, may have been as a part of the newly established Pythian games in AD 376.

[106] It does not imply however that all athletic competitions were discontinued along with the large festivals.

[107] Hugoniot (2003) pp.691-3.

[108] Their presence in mosaics continues even into the 6th and 7th centuries AD. In a bath at the site of Henchir Herrich, in Tunisia there are scenes of athletes wrestling. A. Ben Abed Ben Khader *et alii* (eds), *Image de Pierre: La Tunisie en Mosaïque* (Lavaur, 2003).

Conclusion

Outside of Greece, it was rare to see large athletic festivals established. Few cities were given permission to have big athletic festivals recognized as 'Panhellenic'. They had to have the ability to successfully maintain a big athletic festival, so it is quite significant that North Africa had four big athletic festivals around the beginning of the 3rd century AD. Carthage and Caesarea had the population size, facilities, and adequate infrastructure to run big festivals. Enthusiasm for athletics was also necessary in order for its continuation as a spectacle. That there was ample support for these games in North Africa is evident because athletes from around the Empire travelled great distances in order to compete in the African festivals.

The four festivals at Carthage and Caesarea were not the only athletic competitions held in North Africa. The elites of smaller North African communities recorded their gifts of *gymnasia* (gymnastic oils), for athletic competitions, to their fellow citizens from the middle of the 2nd century to the end of the 3rd century AD. Sometimes many unspecified athletic contests were organized and sometimes only one contest, such as boxing or wrestling. The many inscriptions and artworks found in North Africa attest to this.

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[109] Hugoniot (2003) p.693.

By the middle of the 4th century AD large organized athletic competitions in North Africa had ceased and only with the permission of the emperor were they restored in AD 376. Although this happened to the large athletic festivals, it does not confirm that small athletic competitions in smaller communities also ceased. In fact artwork from the 3rd and 4th centuries AD suggests that some athletic competitions were still held. Thus it is clear that athletics were an important form of entertainment in North Africa throughout the Roman period. Whether given as part of some large festival or just as a small competition commissioned by some local magistrate, athletic competition was a part of North African cultural life.

Although Carthage and Caesarea had purpose-built *stadia*, the majority of North African communities did not have these buildings. Other venues, such as open spaces, were presumably used to hold athletic exercise and competition. In the next chapters I will examine the role played by baths, and more specifically the *palaestra*, in local athletic culture. First, however, I will discuss the early form of *palaestrae*, both Hellenic and early Italic, to determine how they evolved over time during the Roman Imperial period, until the time they begin to appear in North Africa. By a clear understanding of their architectural features, it will be easier to identify them in the North African archaeological record. After successfully identifying them, an examination of their function will follow.

Chapter 2: The Graeco-Roman *Palaestrae*

Roman North Africa was a region with a strong athletic culture. Chapter One showed that athletic competitions were frequently held there from the middle of the 2nd to the 4th century AD. The *palaestra* played an important part in this athletic culture, because it was a location for athletic exercise and possibly even competition. Therefore one would expect to find many *palaestrae* in North Africa. But, what are *palaestrae* and how are they identified in the archaeological record? Should *palaestrae* be identified according to form or function? Do the architectural features or do the activities occurring within define a *palaestra*? Does form follow function, or does function follow form? These are difficult questions to answer because there is no consensus as to either the form or the function of the *palaestra*, either among ancient or modern writers.[1] It is equally agreed that the *palaestra* was used for physical exercise and therefore surely played a role in athletics, but some structures, identified as *palaestrae*, could not have accommodated all types of athletic events.[2] In studying *palaestrae*, we need to begin by determining a set of criteria for their construction and design. This will help in determining their function, or functions, because certain activities required specific facilities.

Determining the form of the *palaestra* is the primary goal of this chapter. This will begin with a close reading of Vitruvius, who provides the earliest description of a *palaestra*. This will be followed by examining the evolution of the *palaestra* in the archaeological record, beginning with Hellenistic examples, which were some of the first constructed in the ancient world. These Hellenistic examples will then be compared to the Vitruvian model in order to determine whether or not Vitruvius used them as prototypes. His description will also be compared to Italian examples of Republican date (5th – 1st centuries BC). The evidence will show that the *palaestra* Vitruvius describes was based on a mixture of Hellenistic and Italian features. After determining these shared common characteristics, an examination of Italian *palaestrae* of post-Vitruvian date will follow in order to establish what changes were made during the Roman Imperial period. It is imperative to determine what the forms of Italian *palaestrae* were in order to establish a basic set of criteria that can be used in identifying North African *palaestrae*. Being able to identify the form of North African *palaestrae* should help in determining their function.

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[1] For example F. Yegül *Baths and Bathing in Classical Antiquity* (New York, 1992) p.400 and Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.72 & 313 both believe that *palaestrae* could be either open or roofed, while I. Nielsen, *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) p.88 disagrees, arguing that true *palaestrae* are always open to the sky, and when covered they should be designated as *basilicae*.

[2] Physical exercise in this chapter will only refer to recreational and athletic exercise, and not athletic competition.

The Vitruvian model

Any study of *palaestrae* in the Roman world must include Vitruvius, because he gives the first description of a *palaestra* in his treatise, *De Architectura*. *De Architectura* was written in the 1st century BC and it detailed the methods of construction for many different types of structures. This includes the *palaestra* and thus it provides a useful working model for studying this type of building. Regardless of this, there is no surviving *palaestra* that exactly matches Vitruvius' model. Instead *palaestrae* uncovered at archaeological sites vary greatly from one another. Nevertheless Vitruvius's text provides a convenient set of criteria, which will help to identify *palaestrae* in the archaeological record. This set of criteria will also be used to determine what features from Hellenistic *palaestrae* continued to be used in the construction of Italian *palaestrae*.

Vitruvius notes that although the *palaestra* was not an architectural structure common in Italy, it was widespread and therefore he believed it was important to show how the Greeks planned the *palaestra*.[3] He then goes on to describe two attached structures, which will be classified as an 'inner' and 'outer' *palaestra* (Figure 2.1).[4] He describes the inner *palaestra* first:

> *In palaestris peristylia quadrata sive oblonga ita sint facienda, uti duorum stadiorum habeant ambulationis circuitionem, quod Graeci vocant diaulon, ex quibus tres porticus simplices disponantur, Quarta quae ad meridianas regions est conversa, duplex, cum tempestates ventosae sint, non posit aspergo in interiorem partem pervenire.*
>
> *In duplici autem porticu conlocentur haec membra: ephebeum in medio ... tertia parte longior sit quam lata; sub dextro coryceum, deinde proxime conisterium, a conisterio in versura porticus frigida lavatio, quam Graeci loutron vocitant; ad sinistram ephebei elaeothesium, proxime autem elaeothesium frigidarium, ab eoque iter in propnigeum in versura porticus. Proxime autem introrsus e regione frigidarii conlocetur concamerata sudation longitudine duplex quam latitudo, quae habeat in versuris ex una parte laconicum ad eundem modum, uti quam supra scriptum est, compositum, ex adverso laconici caldam lavationem.*[5]

In summary Vitruvius says that the 'inner' *palaestra* has square or oblong rows of colonnades (columns) constructed with a walkway around them. Three sides are single colonnades, and there are various rooms situated throughout, some with interior seating. The fourth side, which is usually in the south, has two rows of columns to prevent rain from reaching the inside. The rooms on the double-colonnaded side are described as being more specifically placed in relation to one another. An *ephebeum* (a room with seats for men) is located in the center of this double-colonnaded side. Moving to the right of the *ephebeum* is a *coryceum* (a room that contained a punching-bag for boxing).[6] Next to this is the *conisterium* (a room where individuals sprinkled their bodies with dust) and in the corner is the cold bath, which the Greeks called the *loutron* (a cold-water bath room). To the left of the *ephebeum* is the *elaeothesium* (a room where individuals anoint themselves with oil), followed by the *frigidarium* (a cold room in the baths) from which the furnace room is entered. Adjoining the inside of the *frigidarium* is a vaulted sweating room called the *laconicum* (sweat-room), and a warm bath is situated opposite this.[7]

---

[3] Vitruvius, *De Architectura* 5.11.1. There were structures identified as *palaestrae* in Italy, such as in the Stabian baths at Pompeii. See below for further discussion on some *palaestrae* examples from Italy. See also Nielsen (1990) for more examples not mentioned below.

[4] This figure is one possible reconstructed drawing of the Vitruvian model. Taken from Vitruvius, *Ten Books on Architecture*, Trans. by I. D. Rowland, Commentary & Illustrations by T. N. Howe (Cambridge, 1999) p.253, fig.88.

[5] Vitruvius, *De Architectura* 5.11.1-2. See Appendix Four for the entire English translation of Vitruvius' description of a *palaestra*.

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[6] For the definition of *coryceum* see Nielsen (1990) p.10 and Yegül (1992) p.491.

[7] For a short discussion on the *frigidarium* and *laconicum* see Nielsen (1990) pp.153-154 and pp.158-159 respectively.

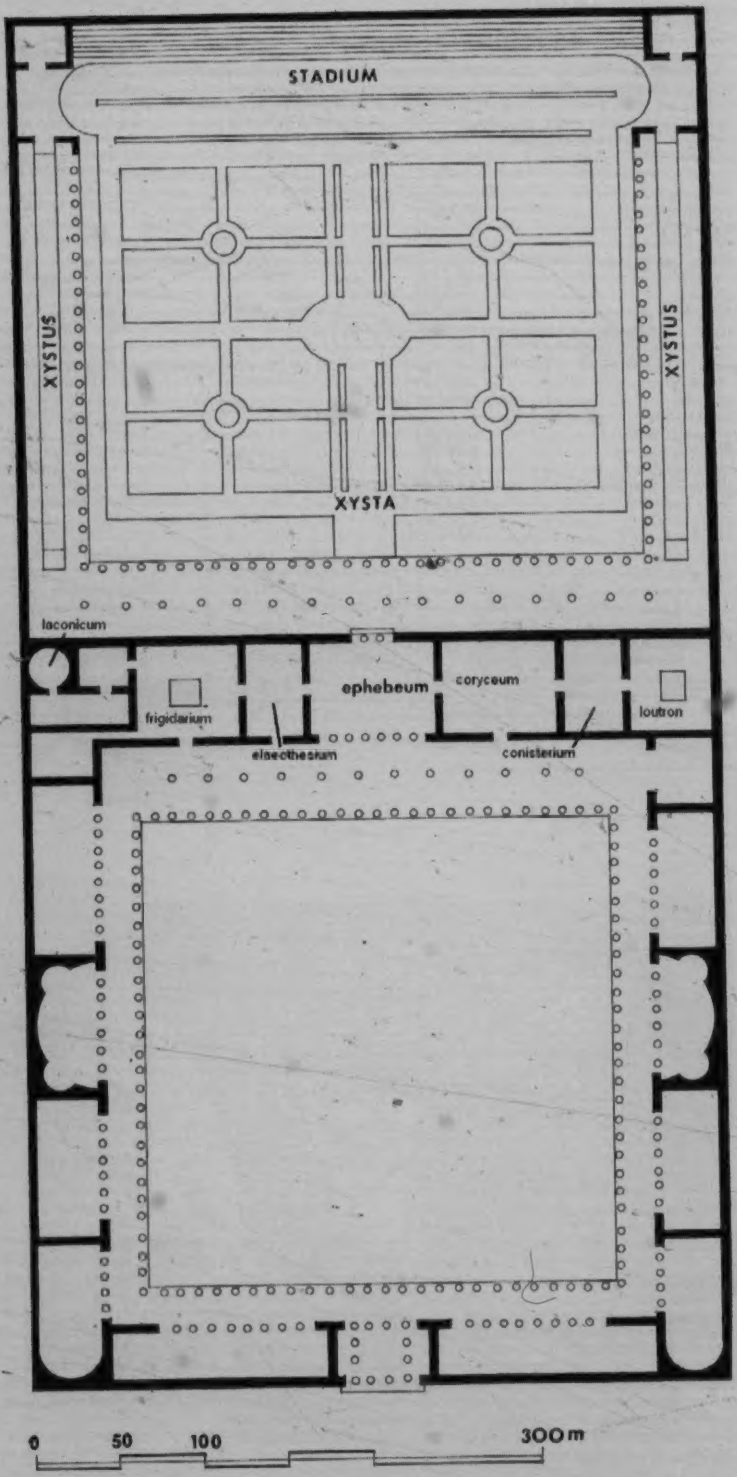

Figure 2.1: Drawing of the Vitruvian model

Based on this description, Vitruvius believed that the 'inner' *palaestra* had three functions. The first was for teaching and learning and Miller believes that this was one of the primary functions of the Hellenistic *palaestra*.[8] Vitruvius says:

> *Constituantur autem in tribus porticibus exhedrae spatiosae, habentes sedes, in quibus philosophi rhetores reliquique, qui studiis delectantur, sedentes disputare possint.*
>
> ...*ephebeum in medio (hoc autem est exhedra amplissima cum sedibus*).[9]

In short there were many rooms along the three single-colonnaded sides providing places where people could gather and discuss learned topics such as philosophy and rhetoric. There was also the large *ephebeum* occupying the central axis, along the double-colonnaded side in order to provide more space for conversation. Thus the *palaestra* provided an abundance of space for men to come and discuss many different topics.

Although the *palaestra* provided a setting for mental stimulation there were also facilities directed towards exercise along the fourth double-colonnaded side of the *palaestra*. Miller believes that physical exercise was the other primary function of the Hellenistic *palaestra*.[10] The *coryceum*, *conisterium* and *elaeothesium* were specialty rooms associated with different activities. Athletes used the *coryceum* for boxing practice, as it held a punching bag, while the *conisterium* and *elaeothesium* were used for powdering and oiling themselves respectively. The middle of the inner *palaestra* also provided ample room for individuals to perform such activities as wrestling, boxing or the *pancration*.[11] There were many spaces for physical exercise, likely for both elite-level athletes and ordinary citizens.[12]

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[8] S.G. Miller, *Ancient Greek Athletes* (New Haven, 2004) p.177.

[9] Vitruvius, *De Architectura* 5.11.2.

[10] Miller (2004) p.177. Although he believes that the Hellenistic *palaestra* had two primary functions, he argues that the gymnasium was used specifically for physical exercise

The third function of the 'inner' *palaestra* involved bathing. The usefulness of the *frigidarium*, *laconicum*, *loutron* and warm bath is apparent, as those exercising would have required facilities for washing the sweat and dirt off their bodies and perhaps also to cool down after a rigorous workout. Their use would not have solely been for those exercising as many may have come to simply relax in a warm bath, sweat in the *laconicum* or to escape a hot day by cooling down in the *frigidarium*. This third function will become more important during the Roman period because, as will be shown, instead of bathing facilities being constructed in a *palaestra*, a *palaestra* was constructed in a bath.

The description above is only half of the *palaestra*, because Vitruvius continues to describe another adjoining section:

> *extra autem disponantur porticus tres, una ex peristylo exeuntibus, duae dextra atque sinistra stadiatae, ex quibus una quae spectaverit ad septentrionem, perficiatur duplex amplissima latitudine, altera simplex, ... ita facta, uti in partibus, quae fuerint circa parietes et quae erit ad columnas, margines habeant uti semitas non minus pedum denum mediumque excavatum, uti gradus sint in descensu marginibus sesquipedem ad planitiem, quae planities sit non minus pedes XII; ita qui vestiti ambulaverint circum in marginibus, non inpedientur ab unctis se exercentibus. Haec autem porticus xystos apud Graecos vocitatur, quod athletae per hiberna tempora in tectis stadiis exercentur.*[13]

Again in summary, Vitruvius says that as one exited the 'inner' *palaestra*, one would see another three rows of colonnades belonging to the 'outer' *palaestra*. There was one colonnade immediately upon exiting and then another to the left and right, which were constructed with running tracks. Of the three, the northernmost colonnade was to be doubled and quite wide, while the other two only have a single row of colonnades. Also along each colonnade was a track, 0.45 m below the paths, and which the Greeks called a '*xystos*'. The purpose of this feature was to prevent those walking on the paths from being disturbed by those using the track. During the winter months however, athletes could use these covered paths for exercise. Clearly this section of the 'outer' *palaestra* was constructed in order to provide ample space for physical exercise and yet be accommodating for persons wishing only to relax.

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[11] A variety of other activities likely occurred, such as jogging, ball games and other recreational exercises not mentioned in ancient texts.

[12] A discussion on whether or not athletes utilized the *palaestra* fpr exercise and competition will be found in Chapter Four.

[13] Vitruvius, *De Architectura* 5.11.3-4.

Vitruvius continues his description of the 'outer' *palaestra*:

> *Proxime autem xystum et duplicem porticum desgnentur hypaethroe ambulationes, quas Graeci paradromidas, nostri xysta appellant, in quas per hiemem ex xysto sereno caelo athletae prodeuntes exercentur. Faciunda autem xysta sic videntur, ut sint inter duas porticus silvae aut platanones, et in his perficiantur inter arbores amublationes ibique ex opere signino stationes. Post xystum autem stadium ita figuratum, ut possint hominum copiae cum laxamento athletes certantes spectare.*[14]

He says that surrounded by the three colonnaded paths is a large open area, which the Romans called the '*xysta*', where walkways and groves of trees were located. These paths are paved with *opus signinum*.[15] Other than for walking, this area was ideal for athletes to exercise when the weather was good. The presence of a paved path on the open track suggests a surface much too hard for any kind of physical exercise except perhaps running or some type of ball game. However a hard surface may not have been that limiting, as Vitruvius mentioned that athletes practiced under the covered walkways during winter. Finally a stadium was constructed behind the outer *palaestra* so that crowds could watch athletes compete. Vitruvius says that the *palaestra* was used for training while the stadium held actual athletic competitions.

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[14] Vitruvius, *De Architectura* 5.11.4.

[15] It is not clear whether the paths are to be partially or completely paved with *opus signinum*. *Opus signinum* was a technique using a variety of materials, such as pottery, gravel and sand, arranged in limestone or clay and which set hard as stone.

Vitruvius and Hellenistic *palaestrae*

a) Hellenistic *palaestrae*

Knowing now what Vitruvius described as a *palaestra*, one wonders how closely his model matches the archaeological evidence for Hellenistic *palaestrae*. Did the features of Hellenistic *palaestrae* continue to be used in the Roman period or were they abandoned for new forms? In order to adequately compare them, a discussion of a few Hellenistic examples is necessary. There do not seem to have been any *palaestrae* before the 6th century BC and it is only after the 5th century BC that *palaestrae* become well known.[16] After this date Delorme argues that their plan type changes very little until the Roman era.[17] Even after the *palaestra* became a more common feature in Greek architecture the word was often interchangeable with another term often associated with athletics, the *gymnasium*.[18] Despite these two terms being interchangeable, there still appear to have been a few distinctions made between them during the Classical and Hellenistic periods in Greece. First, a *palaestra* was considered to be a private facility used mainly by younger men, while a gymnasium was open to the public.[19] This was a social difference and is difficult to determine from the archaeological record without written evidence. Of course not all *palaestrae* were private, as the *palaestrae* at Olympia and at Delos were used by athletes from all over the Greek world attending athletic contests.[20] The second distinction between the two structures was that a *palaestra* could exist either independently or as part of a gymnasium.[21] This would suggest that certain architectural features must have been present in order to distinguish a gymnasium from a *palaestra*. For Greeks, then, the *palaestra* had important differences from the gymnasium.

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[16] S.L. Glass, *Plaistra and gymnasium in Greek architecture, Diss.* Philadelphia (1967) (Ann Arbor, 1981) p.62.

[17] J. Delorme, *Gymnasion: étude sur les monuments consacres a l'éducation en Grèce* (des origines a l'Empire romain) (Paris, 1960) pp.409-417.

[18] Miller (2004) p.176. This phenomenon still exists in present scholarship. As for the definition of *gymnasium* in North Africa see Appendix One.

[19] See Aristotle, *Oec* 2.1346b, Plutarch, *Amat.*755c, Pausanias 10.4.1 and *SEG*.9.4.1.44 regarding the gymnasium being a public institution. Sources taken from Glass, (1967) p.71, ft: 212 & 213. See also Delorme (1960) pp.261-262.

The first example comes from Olympia (Figure 2.2). The *palaestra* here (66.35 m by 66.75 m) was attached to the gymnasium.[22] Drees dates the construction of the *palaestra* around the end of the 3rd century BC. He describes it as an open space with colonnades around all four sides. Both the east and west wings have large and small study rooms equipped with benches. Along the north wing, around the central axis, is the largest room (*ephebeum*?), which also had benches. At the west end of this same wing is a latrine and at the east end is a cold-water room (*loutron*); Drees believes both were already in existence at Olympia when the *palaestra* was built. Two of the rooms along the north wing, as well as the entire south wing, do not appear to have benches.[23]

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[20] Z. Newby, *Athletics in the Ancient World* (London, 2006) p.221 notes that Olympic victors, during the Imperial period, were scarce in the cities of mainland Greece. Instead the majority of victors come from Asia and Egypt. For a list of Olympic victors see A. Farrington, "Olympic Victors and the Popularity of the Olympic Games in the Imperial Period" *Tyche* 12 (1997) pp.15-46.

[21] Glass (1967) p.71, Delorme (1960) pp.266-267, N. Gardiner, *Athletics of the Ancient World* (Oxford, 2002) p.72, and F.E. Winter, *Studies in Hellenistic Architecture* (Toronto, 2006) p.118.

[22] L. Drees, *Olympia: Gods, Artists and Athletes* (New York, 1968) p.48.

[23] Drees (1968) pp.45-47.

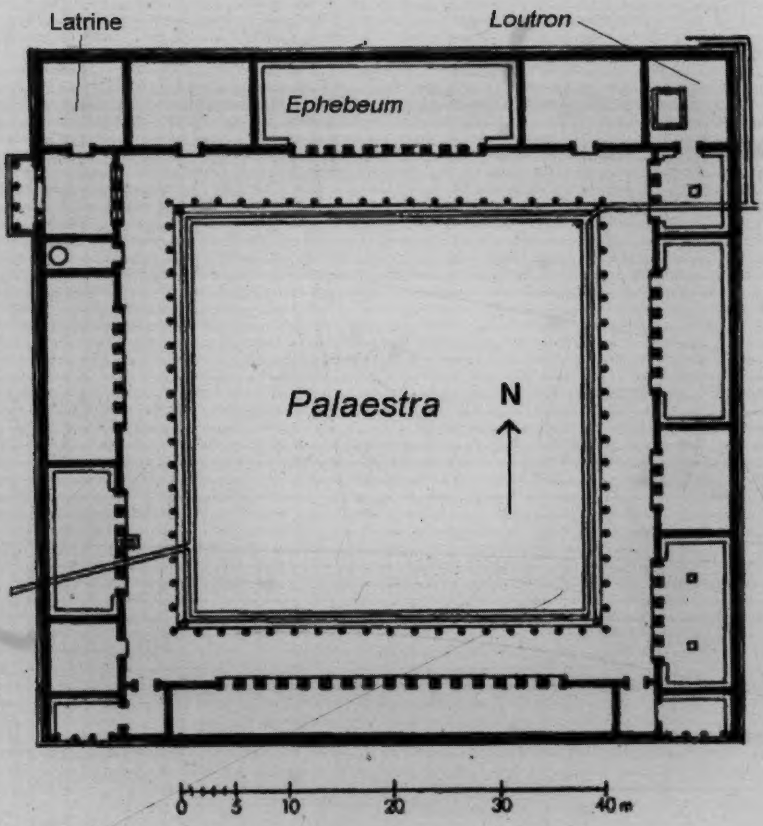

Figure 2.2: Plan of Olympia *palaestra*

The gymnasium at Olympia was immediately to the north of the *palaestra* and constructed later (Figure 2.3).[24] It is a large open space surrounded on all four sides by colonnaded walkways, with the south side measuring 120 m long and the east side measuring 220 m. Drees believes that the rooms along the entire west colonnade were the accommodations for the athletes, as mentioned by Pausanias.[25] The east colonnade is double, measuring over 10 m wide and had soft sand spread out over its floor. This colonnade also has two tracks, each measuring 192 m long.[26] Olympia has three *stadia*, all located on the east side of the site.

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[24] Drees (1968) p.47.
[25] Drees (1968) p.47.
[26] Drees (1968) pp.47-48.

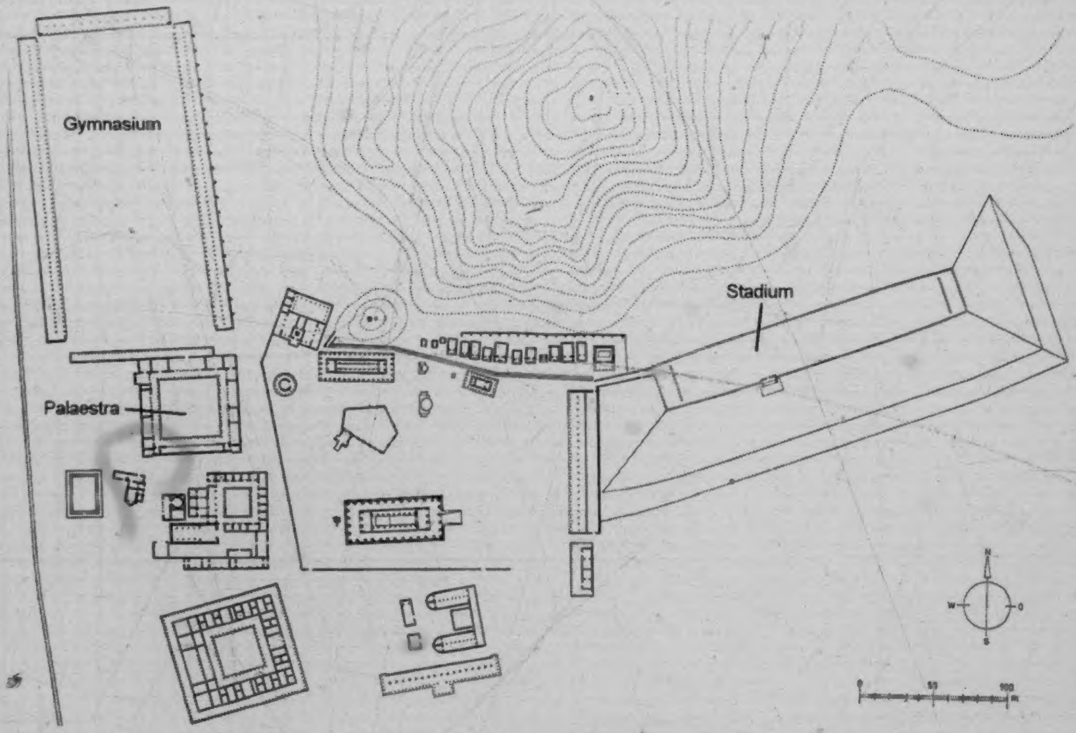

Figure 2.3: Map of Olympia

Another good example of a Hellenistic *palaestra* comes from Priene (Figure 2.4). This is considered to be one of the best existing examples of a small square-shaped *palaestra*, although Winter notes modern scholars often refer to it as the "lower gymnasium".[27] Constructed in the 2nd century BC it was situated on a terraced slope alongside a stadium. Winter describes this *palaestra* as having a courtyard measuring 34 m x 35 m, surrounded by a three-sided colonnade with the north side having two rows. He also identifies the room occupying the central axis along the north side as an *ephebeum*, because there is still graffiti on the walls from boys who had written their names into them. The west end of this same side is a cold-water room (*loutron*), as there are basins and waterspouts situated against the back wall. At the east end is perhaps the change room (*apodyterion*).[28] The west side of the *palaestra* also has rooms, while the east and south sides do not have any. To the east of the *palaestra* is a stadium, which had a colonnaded walkway running along its north side.[29]

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[27] Winter (2006) p.123. R. Tomlinson, *From Mycenae to Constantinople: The Evolution of the ancient city* (London, 1992) p.92 also refers to it as the lower gymnasium.

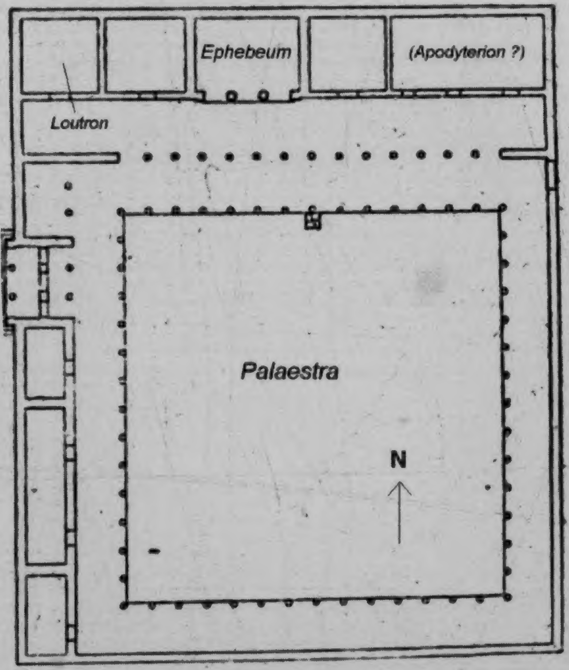

Figure 2.4: Plan of Priene *palaestra*/lower gymnasium

Winter describes another *palaestra*, this time at Amphipolis (Figure 2.5). There are open and covered practice tracks linked to the *palaestra*. It was constructed in the early 3rd century BC and situated on sloping ground. The courtyard is 20.6 m x 15.4 m and has colonnades surrounding all sides. The north and south sides have 6 columns each while the east and west sides have 8 and are doubled. On the north side at the west and east corners are cold-water rooms, as basins and waterspouts are still present. Winter suggests that the other rooms along this north side could be the *conisterium* and

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[28] Winter (2006) p.124.

[29] Tomlinson (1992) p.92 and Winter (2006) p.124.

elaeothesium. Supports for wooden benches along the walls on the west side suggest that it was the *ephebeum*. The change room (*apodyterion*) may have been located in the southeast corner, while the remaining rooms in the *palaestra* cannot be identified.[30] Although no stadium was near the *palaestra*, Winter identified a *xystus* (the covered colonnade) nearby, measuring about 7 m wide and believed to be 175 m long, which was the length of a stadium. Starting gates were found and therefore he believes that it was designed to allow runners to compete.[31]

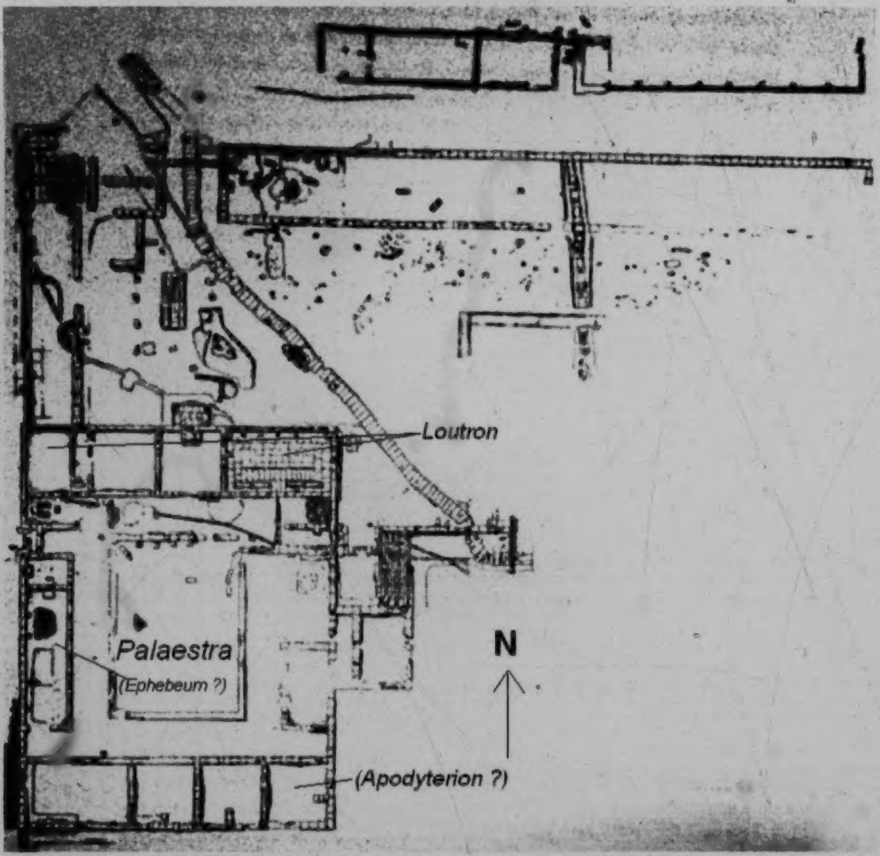

Figure 2.5: Plan of Amphipolis *palaestra*

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[30] Winter (2006) p.124.
[31] Winter (2006) p.124.

Although examples of only three Hellenistic *palaestrae* are used here, there are a number of significant features common to all. The first is that they were all square-shaped courtyards surrounded by colonnades.[32] Only two of the *palaestrae* have columns surrounding the entire courtyard, but the presence of columns is a feature shared by all. Second there is a large room occupying the central axis along one side of the courtyard. This is usually identified as the *ephebeum* because it is larger than the other rooms and typically had benches lining the walls. Lastly there is a cold-water room (*loutron*) located somewhere around the courtyard. All three *palaestrae* also had extra rooms and facilities located around their perimeter. The location of these rooms was likely dependent upon the builder and the overall function of the structure. Whether the *palaestra* was constructed for athletics, learning, or other purposes likely determined the position and function of the other rooms giving each *palaestra* its own unique shape and look. Another common feature was the close proximity of a stadium, or in the case of Amphipolis, a *xystus* with dimensions resembling a stadium. Now that a few examples have been examined, how do they compare to that of the Vitruvian model?

b) The Vitruvian model compared to Hellenistic *palaestrae*

It is clear that the *palaestra* at Olympia was used for both study, exercise and bathing, just as Vitruvius described. The *palaestra* at Olympia was well equipped for physical exercise, most likely for athletics, as Olympia was where the Olympic Games were held. The 'inner' courtyard was square-shaped, open to the sky and consisted of bare earth, which the ancient writer Lucian mentions was ideal because it was softer and safer for exercises, such as wrestling.[33] Drees assumes that one of the rooms without benches in the north wing was the *coryceum* because it had loose soil for floors and thus likely a facility for physical exercise. Drees also suggests that on either side of the *ephebeum* were the *elaeothesium* and the *conisterium*; however his identification of these rooms is not based on any archaeological evidence.[34] It is rather because this was where Vitruvius placed these rooms when describing the layout of a *palaestra*.[35] Whether or not Drees is correct in identifying the *elaeothesium* and the *conisterium*, it is clear that there was a room to the left and right of the *ephebeum*, which was consistent with Vitruvius' description.

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[32] Although none of these *palaestrae* are complete squares, they all closely appear as these shapes.

The *palaestra* at Olympia was also used for intellectual activity. The room occupying the central axis of the north wing was larger than the others around the courtyard and is therefore identified as the *ephebeum*, just as Vitruvius described. This space also has the remains of benches, suggesting they were used for socializing and discussing learned topics. Benches were also found in many of the rooms along the east and west wings, again pointing to areas used for discussion and study. As well these rooms could have been used for relaxing after physical exercise. Lastly the *palaestra* at Olympia was also used for washing, another function attributed to the Vitruvian model. In the corner of the north wing there was a cold-water room (*loutron*). Although not the same as the *frigidarium* Vitruvius describes, it was a room designated for cold-water washing. These rooms designated for study and washing were situated around the courtyard, which also corresponds to the Vitruvian *palaestra*. Next to the *palaestra*, was a gymnasium, which is very similar to the 'outer' *palaestra* described by Vitruvius. This area was a large open area surrounded on all sides by a colonnaded walkway, with the east colonnade having two rows of columns and two running tracks. Although the double-colonnaded side was on the east side rather than the north, it still resembled the 'outer' *palaestra* Vitruvius describes.

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[33] Lucian, *Anacharsis* 28.
[34] Drees (1968) p.46.
[35] Vitruvius, *De Architectura* 5.11.2.

The 'inner' and 'outer' *palaestrae* at Olympia do not possess all of the features mentioned by Vitruvius. Moreover they contain some elements not discussed, such as a latrine in one corner of the north wing of the 'inner' *palaestra*.[36] There is also no evidence in the 'inner' *palaestra* at Olympia for the presence of a furnace room and thus a *laconicum* (sweating room) and a warm bath also appears to be absent. There were hot baths in the vicinity of the *palaestra* at Olympia but they were not part of the complex.[37] The 'outer' *palaestra* also did not completely conform to the Vitruvian *palaestra*. The open area was not covered with groves of trees and paved walkways. The west colonnade also had rooms for housing the athletes, which was not a feature of the Vitruvian model. Finally although there were *stadia* at Olympia, none were located behind the *palaestra* or gymnasium. Drees and Winter both believe that the overall size of the *palaestra* at Olympia is smaller than the Vitruvian model.[38] This is a strange hypothesis because Vitruvius does not give any specific measurements as to how large the *palaestra* should be. He gives the measurements of some features, such as the 0.76 m drop of the running track inside of the colonnaded walkways of the 'outer' *palaestra*, but never the length of any given side of this structure. Therefore it is impossible to say for certain whether or not Vitruvius' *palaestra* was smaller or larger than that at Olympia.

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[36] Drees (1968) p.46.
[37] Winter (2006) p.130.
[38] Drees (1968) p.46, and Winter (2006) p.130.

Similarities and differences between Vitruvius's *palaestra* and those at Priene and Amphipolis are also apparent. Both Hellenistic *palaestrae* had square-shaped courtyards, although varying in size and surrounded by colonnades. An *ephebeum*, accommodating lecturing and learning, was present in both, although located in different areas of the structure. The presence of basins and waterspouts at both sites suggest a cold-water room (*loutron*). There was no indication at either site of a furnace, which would have provided heat for a warm bath. Although both *palaestrae* had many other rooms around the courtyard, a lack of evidence prevents any specific identification. Some of the rooms may have functioned as *conisteria*, *elaeothesia* or *apodyteria*, but these assumptions are based primarily on Vitruvius's description rather than any solid archaeological evidence. Regarding the 'outer' *palaestra*; the *xystus* at Amphipolis did not possess groves of trees or a stadium. At Priene, although there was a stadium and a colonnaded walkway along the north side, the latter lacks many features described in the Vitruvian model, such as the groves of trees and another courtyard surrounded by further colonnades.

Thus, the features of Vitruvius' *palaestra* are in part taken from Greek examples. Although the *palaestrae* at Olympia, Priene and Amphipolis do not conform to Vitruvius' description precisely, they are clearly very close. They all had a square-shaped courtyard surrounded by colonnades, a large room occupying the central axis along one side of the courtyard and a cold-water room (*loutron*). Some of the unidentified rooms in the 'inner' *palaestrae* of these three Hellenistic examples could be some of the rooms that Vitruvius describes, but there is nothing to determine that this was the case. The 'outer' *palaestrae* of these three examples are also very similar, as two possessed *stadia*, while the third had a *xystus*. The one prominent Vitruvian feature missing from these Hellenistic *palaestrae* was the warm bathing facilities. If there were no warm rooms in Hellenistic *palaestrae*, then where did Vitruvius get the idea that a *palaestra* possessed these features? Vitruvius seems to be aware of the changes occurring in Hellenistic *gymnasia*. As Delorme has demonstrated, it was during the Hellenistic period that gymnasium buildings slowly began to incorporate facilities for warm bathing. By the end of the 1st century BC *gymnasia* had full Roman-style bathing suites added to them.[39] Although it is possible that Vitruvius got his idea for the plan of his *palaestra* from earlier Hellenistic models, it is more likely that the inspiration for his textbook *palaestra* came from contemporary Italian buildings with which he would have been more familiar. If this was the case then how different were these Italian *palaestrae* from Hellenistic ones and what were the new features which they incorporated?

Early Italic *palaestrae*

The study of some Italic *palaestrae* is necessary to establish if and what changes were made to the structure by the time Vitruvius wrote his description. Glass argues that by the Roman period the distinctions between the *palaestra* and the gymnasium disappear.[40] This being the case, is it possible to determine a definitive form of the early Italic *palaestra* and if so was it similar or different from the Hellenistic *palaestra*? One noticeable difference that will be evident is that in the west half of the Roman Empire

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[39] Delorme (1960) pp.489-494 and Yegül (1992) p.23.
[40] Glass (1967) p.73.

palaestrae were less a part of the Greek gymnasium and more a permanent feature of baths.[41]

One of the earliest examples of a *palaestra* is found in the Stabian baths at Pompeii in Campania. Campania had a large Greek population, and therefore the influence of Hellenistic architecture is not surprising.[42] As a result, the *palaestra* in the Stabian baths originally had many features similar to its counterparts in Greece. Nielsen has noted that the Stabian baths are dated to the 5th century BC, after which they underwent many alterations up to the 1st century AD.[43] Therefore the *palaestra* in the Stabian baths is a good example because it will illustrate the changes which were made as Roman influence became stronger in the region.

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[41] In the eastern half of the Roman Empire there are still many examples of *gymnasia* being constructed. For example see F. Yegül, *The Bath-Gymnasium Complex at Sardis* (Cambridge, 1986) and A.C.G. Smith, "The gymnasium at Alexandria Troas. Evidence for an outline reconstruction" *AnatSt* 29 (1979) pp.23-50.

[42] R. Ling, *Pompeii: History, Life and Afterlife* (Stroud, 2005) p.34. He argues that the layout of the streets of Pompeii points to another group other than the Greeks as the founders of the city. He also points to Strabo who states that the city was 'once held by the Oscans, then by the Tyrrheni and the Pelasgi, and after that by the Samnites'. Strabo, *Geography* 5.4.8. C. Holleran, "The development of public entertainment venues in Rome and Italy" in *Bread and Circuses. Eurgetism and municipal patronage in Roman Italy* (London, 2003) p.47 also notes that Pompeii was way ahead of Rome with regards to urban development. In particular concerning entertainment structures and baths complexes.

[43] Nielsen (1990) pp.25-35, and Yegül (1992) p.61. L. Richardson, *Pompeii: An Architectural History* (Baltimore, 1988) pp.103-104 argues that the organization of the Stabian baths occurred in one single operation rather than as a progression, as Nielsen believes.

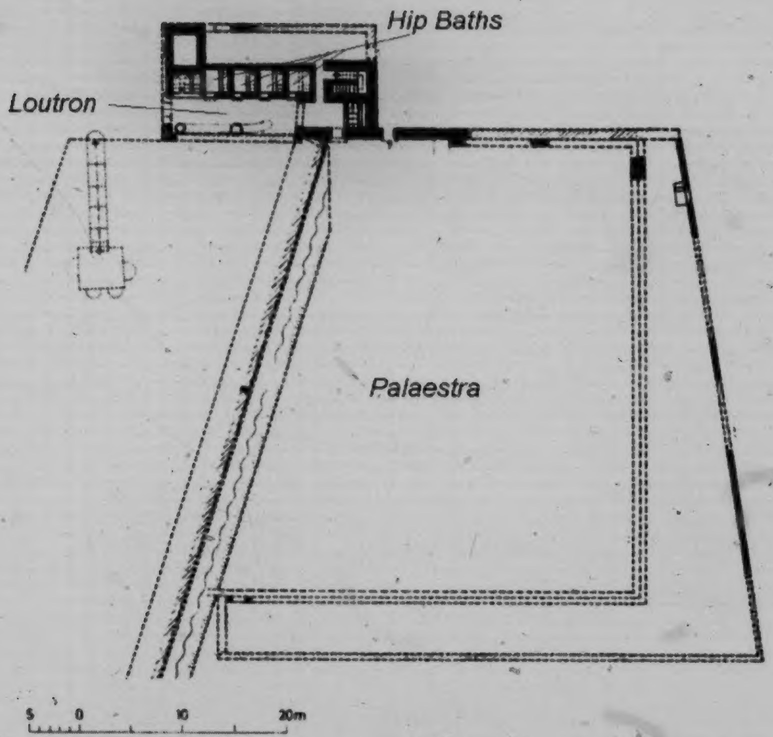

Figure 2.6: Plan of Stabian Baths at Pompeii (5th century BC)

When the Stabian Baths were first constructed in the 5th century BC at Pompeii, the Samnites had spread into the area and, as Strabo tells us, were in control of the city.[44] Excavations by Hans Eschebach have shown that initially the Stabian Baths possessed a *palaestra* that was simply a large open space, irregularly shaped, with hipbaths located in the north wing and a *loutron* in front of these (Figure 2.6). Immersion baths eventually replaced the hipbaths in the 4th century BC, and in the 3rd century BC a portico was erected around the *palaestra*; as well rooms were added to the northeast side (Figure 2.7).[45] Guzzo believes that the *palaestra* during this time was the nucleus of the original building.[46] Although the additions were built using the Italian construction techniques

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[44] Strabo, *Geography* 5.4.8, and Ling (2005) p.35.
[45] Nielsen (1990) pp.25-26.
[46] G. Guzzo & A. d'Ambrosio, *Pompeii* (Naples, 1998) p.132.

opus incertum and *opus caementicium*, the form of the *palaestra* closely resembles those from the Hellenistic world.[47] By the beginning of the 3rd century BC all *palaestrae* contained similar features, with minor variations. They possessed a courtyard surrounded by columns, rooms around the courtyard and facilities for cold-water bathing.[48] Although similar to Hellenistic examples, the early *palaestra* in the Stabian Baths was quite different from the Vitruvian model, as it was missing many of the warm bath facilities, as well as the stadium, running tracks and groves of trees located in the 'outer' *palaestra*. Two other noticeable differences in the *palaestra* of the Stabian Baths were (1) that a house was constructed on its west side sometime during the second half of the 3rd century BC (Figure 2.8), and (2) the *palaestra* was not square.[49] The lack of space in Pompeii may have warranted both differences, as the addition of the house was surely not supposed to be a new Campanian or Pompeiian innovation to the *palaestra* complex.

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[47] *Opus incertum* is the technique using irregular shaped and uncut stones placed over top a concrete core, while *opus caementicium* was the technique of using concrete to build structures.

[48] It is unclear whether one of these rooms was the *ephebeum*, which was typically found in the Hellenistic *palaestrae*, however the likelihood is good.

[49] Nielsen (1990) p.26.

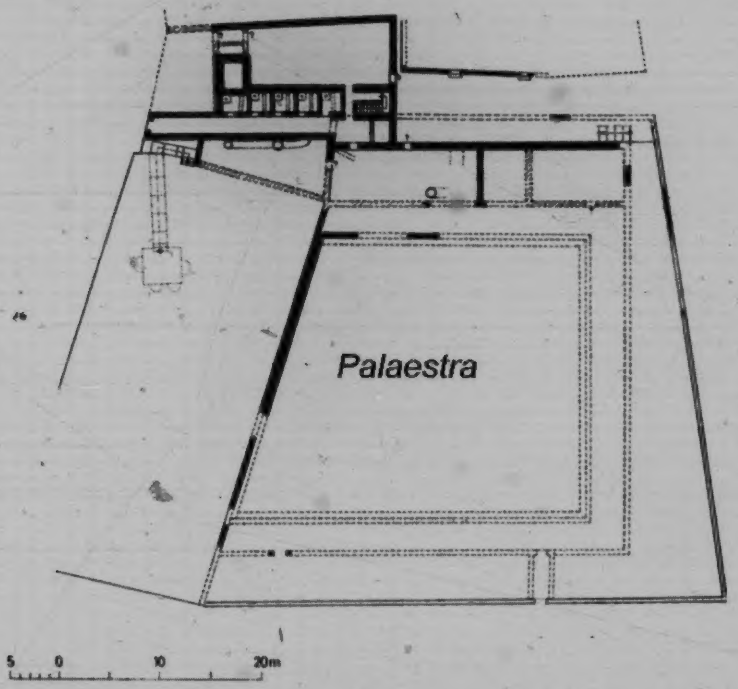

Figure 2.7: Plan of Stabian Baths at Pompeii(mid 3rd century BC)

During the 4th and 3rd centuries BC, Rome successfully went to war against the Samnites and subsequently Roman influence began to permeate the Samnite regions, including Campania. By the end of the 3rd century BC, Pompeii began a new stage in building, strongly influenced by Hellenistic models.[50] As Ling points out, many of the new public buildings at Pompeii were Greek in style and function.[51] They included the Stabian Baths, where the *palaestra* began to change significantly (Figure 2.8). These changes were mostly due to the expansion of bathing facilities to the east at the expense of the *palaestra*.[52] These new rooms have been identified as *tepidaria* (warm rooms) and

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[50] Nielsen (1990) p.28. Yegül (1992) p.48 notes that the 2nd century BC was the period when Roman baths began to change and coincidentally coincided with the political expansion of Rome outside of the Italian peninsula.
[51] Ling (2005) p.44.
[52] Nielsen (1990) p.27.

caldaria (hot rooms), which both required a source of heat for warming water.[53] These new additions may be the warm baths that Vitruvius mentioned but were usually not present in Hellenistic *palaestrae*. Although connected, these new rooms did not open directly into the *palaestra*. It also appears that the Stabian Baths were divided into female and male areas, with the female area in the north closed off to the *palaestra*.[54]

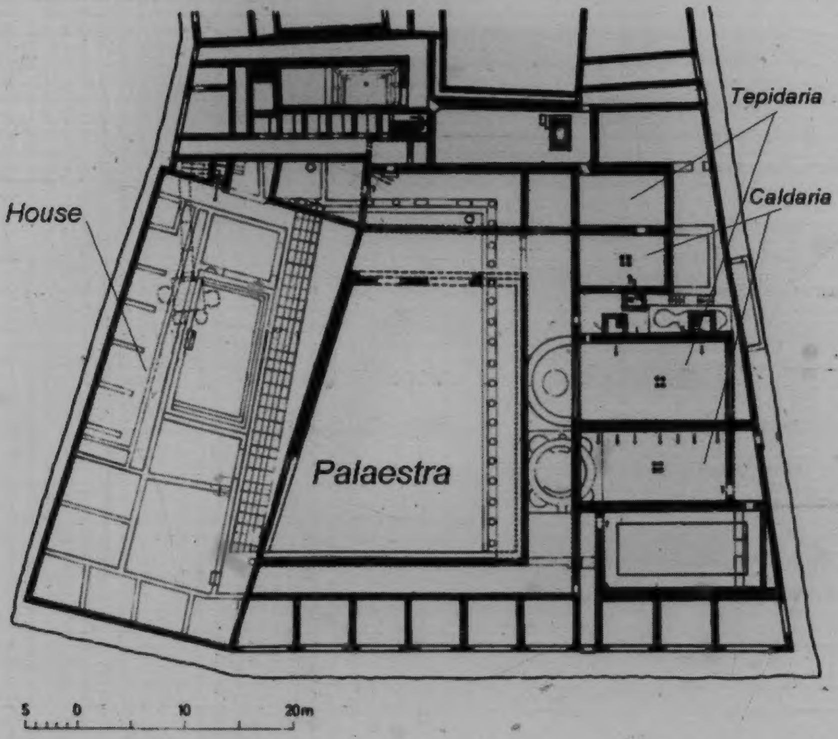

Figure 2.8: Plan of Stabian Baths at Pompeii (end of 3rd century BC)

It appears that the educational purpose of the *palaestra* diminished and emphasis on bathing increased. Ling also argues that although the Stabian baths were Greek in style the main difference between the Stabian Baths and a Greek gymnasium was that "the Pompeian version played down the role of physical training, reducing the proportion of space occupied by the *palaestra*, and put emphasis on bathing."[55] Ling seems to suggest that although the function of the *palaestra* in the Stabian Baths changed in the 2nd century BC, the form did not because it was in 'a Hellenistic fashion' possessing some of the same architectural elements, such as a colonnaded exercise ground.[56] However, when actually compared to Hellenistic *palaestrae* it seems clear that the form of the *palaestra* in the Stabian Baths was quite different. Instead it follows more closely the *palaestra* described by Vitruvius, with its warm baths. Nielsen rightly notes that although Hellenistic influence is apparent in the Stabian Baths, the establishment is essentially Italic because Hellenistic *palaestrae* did not have hot-bath facilities.[57] Therefore the form of the *palaestra* in the Stabian Baths had both Greek and local or Italic influences.[58]

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[53] There is no consensus regarding the exact date as to when *suspensurae* and the hypocaust system were placed in the Stabian baths at Pompeii, but it is at this time when heated rooms do begin to appear. It is the connection between warm baths and *palaestrae* that is relevant to this discussion rather than the construction of these rooms. See Nielsen (1990), G.G. Fagan, *Bathing in Public in the Roman World* (Ann Arbor, 1999) and Yegül (1992) regarding some discussion on when *suspensurae* and the hypocaust system first emerged in Roman bath technology.
[54] Richardson (1988) p.102, and Nielsen (1990) p.28.

The Social War of 91 – 89 BC ended the Samnite dominance of Pompeii and in 84 BC the city was admitted into the Roman commonwealth.[59] When Pompeii became a colony in 80 BC, officials brought funds with them in order to reconstruct the Stabian Baths (Figure 2.9).[60] Along with refurbishing the *palaestra*, two new rooms were constructed on the east side, a *destrictarium* (room where athletes had dust and oil scraped off) and a sweat bath (*laconicum*), the latter a feature of the Vitruvian *palaestra*. This sweat room was eventually transformed into a cold room (*frigidarium*) at the end of the 1st century BC.[61] Also during this period the house in the west was demolished, which allowed for the addition of some new rooms and a swimming pool flanked by two smaller pools. This also meant that the *palaestra* was slightly extended. The additions of the pools meant that the *loutron* and the hipbaths could be removed. Thus by the end of the 1st century BC, the original *palaestra* of the Stabian Baths had undergone so many changes and additions that it was now, in effect, a Roman structure.

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[55] Ling (2005) p.45.
[56] Ling (2005) p.45. He does admit however that the Stabian Baths in the 2nd century BC should be considered a Roman type: (2005) p.129.
[57] Nielsen (1990) p.28. Nielsen (1990) p.29 notes that there were baths in Rome around 200 BC that were separated into two sections and used hot water, similar to the Stabian Baths. She does not mention however if these baths possessed a *palaestra* as well.
[58] Nielsen (1990) p.28 and Fagan (1999) p.44.
[59] Ling (2005) p.51.
[60] *CIL*, 10.829.

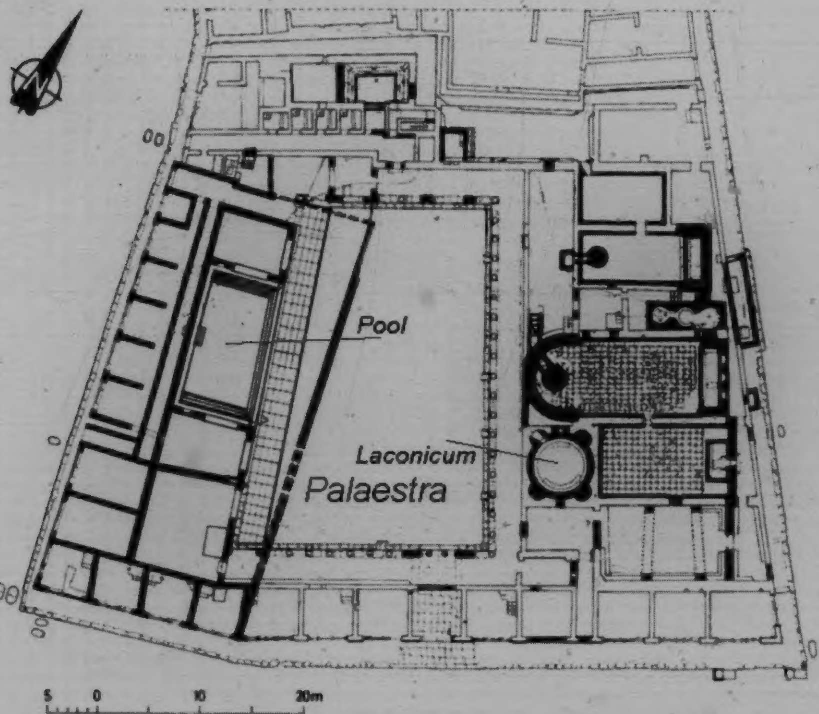

Figure 2.9: Plan of Stabian Baths at Pompeii (end of 1st century BC)

After examining the history of the Stabian Baths it is apparent that in the beginning, except for its shape, the *palaestra* followed the Hellenistic model. It was an open space with its recognizable features, a *loutron*, hipbaths and accompanying rooms.

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[61] This change is thought to have occurred because of the introduction of tubulation, which allowed the *caldarium* to be utilized also as a sweat room. Nielsen (1990) p.33.

Over time the open area acquired a row of single columns around it, another feature found in the Hellenistic examples. At this point the function of the *palaestra* seems to have been for physical exercise, study and washing, following again the function of Hellenistic *palaestrae*. Around the end of the 3rd century BC the *palaestra* in the Stabian Baths began incorporating more bathing facilities, eliminating the rooms for study and minimizing the space for exercise. These new bathing facilities included warm and hot rooms, Italic features of the Vitruvian *palaestra*. The changes appear to coincide with the increasing Roman influence in the area. The emphasis on bathing continued into the 1st century BC, with the addition of a swimming pool and sweat room, the latter again a feature of the Vitruvian model. Although these new features suggest that the final stage of the *palaestra* in the Stabian Baths closely resembled the Vitruvian model, it was still missing many other features, like the rooms around the courtyard used for discussion and exercise, such as the *elaeothesium* and the *conisterium*.[62] There was also no indication of an 'outer' *palaestra*, with its groves of trees, covered running tracks and attached stadium.

At the time of the eruption of Vesuvius in AD 69 the form of the *palaestra* in the Stabian baths was very different from the Hellenistic examples and the model described by Vitruvius. The function of the *palaestra* also changed, with bathing taking precedence over the Hellenistic functions of study and exercise. Although the rooms for study appear to have been removed, the open area of the *palaestra* was never completely rebuilt over, suggesting that physical exercise still played a role. The reason for its attachment to baths may be linked to the belief by Romans, such as Celsus (25 BC – AD 50) and Pliny the Younger, that exercise and bathing were good for one's health.[63]

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[62] However the inclusion of the *destrictarium* (room where athletes had dust and oil scraped off) could be said to have replaced these two rooms. Regardless of this, one room was substituted for two further suggesting that physical exercise played less of a role in the Stabian Baths.

That *palaestrae* were now associated primarily with baths is apparent in another *palaestra* from Pompeii belonging to the Forum Baths, constructed after 80 BC (Figure 2.10).[64] The construction of these baths utilized Roman techniques, such as *opus quasireticulatum*, and employed the hypocaust system.[65] Nielsen believes that a small square-shaped *palaestra*, measuring around 18 m by 20 m, was present at the time of construction, which was later made smaller in order to accommodate more rooms for bathing.[66] A row of single columns bordered all sides except the south and a bench ran along the north portico and opened into a deep exedra (room open to the *palaestra*).[67] All of the bathing rooms were constructed to the northwest of the *palaestra*, placing it at the edge of the establishment, which was unlike earlier examples where the *palaestra* was centrally located. As with the Stabian baths, these were also separated into men and women's areas and only the men's side was connected to the *palaestra*.[68] Although the *palaestra* in the Forum Baths was not large, it was spacious enough to accommodate physical exercise.

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[63] Celsus, *De Medicina* 1.1-2 and Pliny the Younger, *Epistles* 9.36.
[64] *CIL*, 10.819. From Nielsen (1990) p.30 n.41. See also Guzzo (1998) p.46.
[65] *Opus quasireticulatum* is a technique using small stones roughly cut in the square shape but irregular enough so that the joint lines do not run straight.
[66] Nielsen (1990) p.30.
[67] Nielsen (1990) pp.30-33. Richardson (1988) p.150 believes it may have been used for conversation.
[68] Richardson (1988) p.147, and Guzzo (1998) p.46.

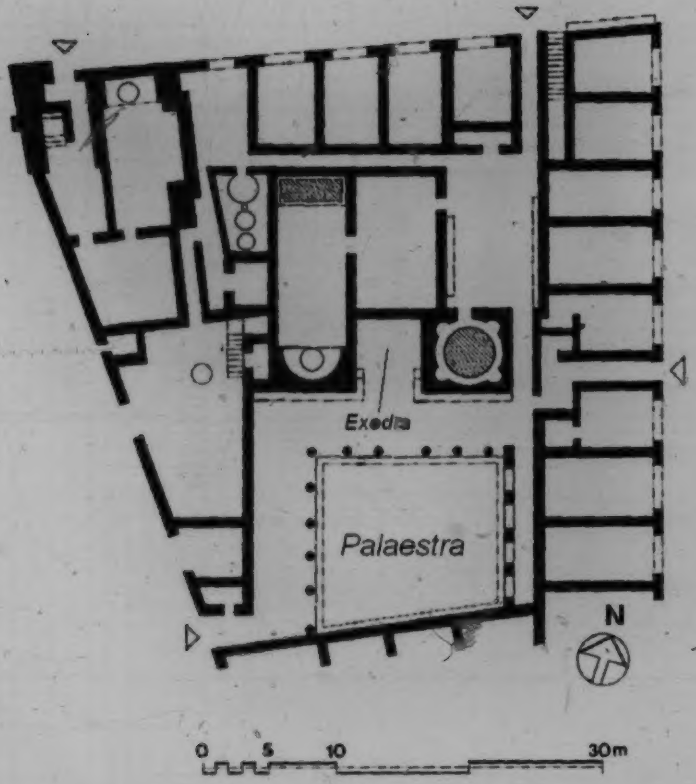

Figure 2.10: Plan of *palaestra* in Forum Baths at Pompeii

As bathing facilities here were more prominent than the *palaestra*, one wonders if other accommodations were made for those wanting an area to train or workout. As mentioned in the previous chapter, other facilities, such as the circus and amphitheatre, and open spaces were more than suitable. At Pompeii, however, another structure was constructed specifically for physical exercise. This structure is generally referred to as the Grand *palaestra*, which was built next to the amphitheatre during the Julio-Claudian period. It has some features common to Hellenistic *palaestrae* (Figure 2.11). The enclosure measures [illegible]00 m by 128 m and has a large rectangular open space surrounded on three sides by colonnades. Running along the sides was a line of trees and a few steps leading up to the portico. There was a large latrine in the south part, and in the center of the west wing was a large room which also acted as an entrance into the building. In the center of the open area was a shallow swimming pool.[69] Richardson argues that this was "not a *palaestra* at all" because it lacks many of the other features necessary for such a structure. It has no rooms of any kind, running tracks, or suitably large open ranges for javelin and discus. He even believes that the pool was too shallow for swimming.[70]

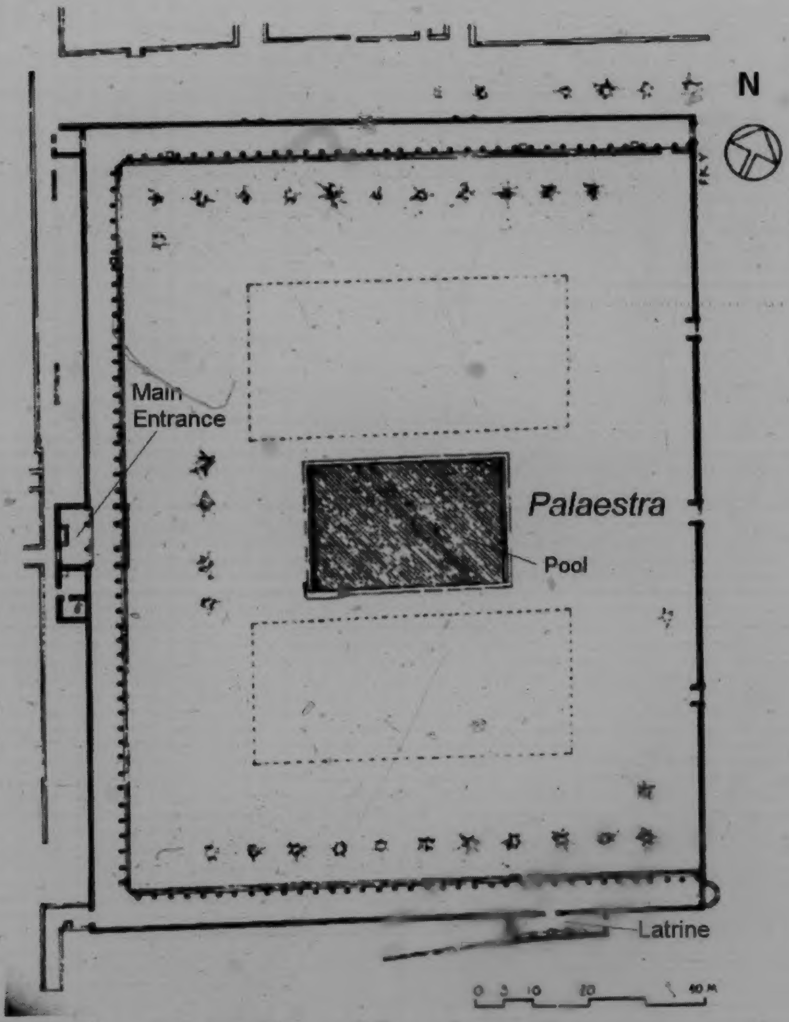

Figure 2.11: Plan of Grand *palaestra* at Pompeii

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[69] Richardson (1988) pp.211-214, Yegül (1992) pp.56-57 & Guzzo & d'Ambrosio (1998) p.103.

[70] Richardson (1988) p.211. Instead Richardson, (1988) pp.214-215, believes that it may have served as a public park.

Although the Grand *palaestra* lacks some of the features common to many of the Hellenistic examples outlined above, like rooms for discussion and cold-water bathing, as well as the square shape, the design was very similar to a Hellenistic *palaestra*. Colonnades surround the central space and it was a suitable area for physical exercise. The main entrance positioned in the center of the west wing, resembled an *ephebeum* but likely did not have the same function.[71] According to Yegül, this structure was very similar to a Hellenistic *palaestra*.[72] Although this is true, it is unique in Roman Italy and does not conform to the Vitruvian *palaestra* model, other than the fact that it has a grove of trees.[73] Regardless of this, the architectural form of the Grand *palaestra* was suitable for physical exercise and possibly some athletic competition, and as it was situated so close to the amphitheatre it may have also been a place for gladiatorial practice.

It appears that by the end of the 1st century BC both the function and form of the Hellenistic *palaestra* had been significantly altered in Italy. Bathing facilities became more prominent, usually at the expense of the *palaestra*. The addition of bathing rooms, specifically warm and hot rooms, suggest that *palaestrae* followed more the Vitruvian model. However this was not the case because no *palaestrae* have been found in Italy closely resembling Vitruvius' description. Why then did Vitruvius give this description of a *palaestra* if there were none that resembled it? Vitruvius may have been aware of two different forms of *palaestrae*, the Hellenistic *palaestra* with accompanying cold-water rooms, and perhaps an Italic bath with accompanying *palaestra*. Aware of two different types, he combined them in order to describe the appearance of a *palaestra*. What is certain is that the form of a *palaestra*, by the end of the 1st century BC, typically possessed an open courtyard surrounded by colonnades and bathing facilities, and the *palaestra* was seemingly being pushed to the edge of the baths, which made it appear quite different from the Hellenistic *palaestra*. The shape of the *palaestra* also appears to have become more random, as it could be square, rectangular or irregular. How the shape of a *palaestra* was chosen was surely dictated by the available space. The functions of *palaestrae* also change, as discussion and study no longer appear to be an important role. Even though the structures were reduced in size in order to accommodate more bathing facilities, they were still used for physical exercise. Therefore *palaestrae* changed from being, in the Hellenistic world, structures which incorporated bathing as a secondary feature, to being a secondary feature of structures which were, in the Roman world, built primarily for bathing.

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[71] It was a large open space in the centre of a colonnaded side just as in the Hellenistic examples.

[72] F. Yegül, "The *Palaestra* at Herculaneum as a New Architectural Type" in R.T. Scott & A. R. Scott (eds) *Eius Virtutis Studiosi. Classical and Postclassical studies in memory of Frank Edward Brown, 1908 – 1988*. [Symposium in memory of F.E. Brown, Rome – Washington 1989] (Washington, 1993) p.380 and Yegül (1992) p.57.

[73] Yegül (1993) p.381. Although there is a similar example of this *palaestra* type at Herculaneum, its occurrence is indeed very rare in Roman Italy.

Palaestrae in Imperial *Thermae* at Rome and in the baths of the Latin West

We must now determine whether the form and function of *palaestrae* in the Roman Imperial period remained the same after the 1st century BC. In Italy *palaestrae* had become a feature of baths, rather than baths being a feature of *palaestrae*.[74] However it must first be noted that not all baths possessed a *palaestra*. The exact reasons for constructing a *palaestra* inside a bath are difficult to determine. Larger baths usually possessed one, because there was available space, but there are examples of smaller baths with a *palaestra* as well, such as the Forum Baths at Pompeii.[75] Based on this, it appears that the size of a bath did not determine the inclusion of a *palaestra*. However, available space and the function of the bath must have played a significant role in this decision. A private bath for athletes would likely possess a *palaestra*, whereas a private bath that did not have athletes as clientele may not. What is clear is that when emperors funded the construction of a bath, it typically possessed one or two *palaestrae*. Newby argues that perhaps the increasing interest in Greek athletics led to *palaestrae* becoming an integral part of Roman baths.[76] The fact that they were features of Greek architecture, as well as a part of Greek athletic and intellectual culture, may have also encouraged emperors to include them in their baths.

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[74] Even the 2nd century AD Greek writer Lucian, *Baths of Hippias* 8, when describing the rooms of a bath, includes a *palaestra*.

The first imperial bath complex was constructed by Agrippa in 25 BC (Figure 2.12). Cassius Dio refers to this as a "Laconian *sudatorium* (sweat-room)". According to Dio, the name *Laconian* was given to the baths because the Lacedaemonians had a great reputation for stripping and exercising after anointing themselves with oil.[77] Though very little remains today, Nielsen believes that these baths contained small *palaestrae* of undetermined shape, for physical exercise, located in the west part of the baths. Therefore, like the Forum Baths at Pompeii, the *palaestra* was located around the edge of the baths. She also believes that this was the first bath in Rome to combine physical exercise and bathing.[78] Another imperial bath that had *palaestrae* was the bath and gymnasium structure (*thermae atque gymnasium*) constructed by Nero in AD 60 or 62. Suetonius uses these Latin words to describe the bath complex of Nero and old plans of this structure indicate that there were two square-shaped *palaestrae* on the north side of the complex, with the open area measuring 30 m by 28 m (Figure 2.13).[79] Each *palaestra* had a row of single columns on every side. Between them was a swimming pool and on the north side of both *palaestrae* were giant *exedrae*.[80] Although neither *exedra* was designated as an *ephebeum*, both were positioned as if they were. Once again the *palaestrae* were located at the edge of the complex with all the bathing facilities located to the south.

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[75] The Romans used two different terms for a bath: *thermae* and *balnea*. How these two were distinguished from one another is uncertain. I. Nielsen, "Early provincial baths and their relations to early Italic baths" in J. Delaine and D.E. Johnston (eds), *Roman Baths and Bathing*, i, JRA Supplement 37 (Portsmouth, RI, 1999) p.35 and Nielsen (1990) p.3 argues that baths with a *palaestra* should be identified as *thermae*, while those without should be identified as *balnea*. However many problems persist in her argument. For other problems relating to these two words and their meanings see Fagan (1999) pp.14-19.

[76] Z. Newby, *Greek Athletics in the Roman Empire: Virtue and Glory* (Oxford, 2005) p.28 argues more specifically that the Baths of Agrippa were constructed in response to the increasing interest in Greek athletics.

[77] Cassius Dio 53.27.1.

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[78] Nielsen (1990) pp.29-59. Newby (2005) p.28 agrees with this supposition.

[79] Suetonius, *Nero* 12. For the plans see Scamozzi, *Le terme dei romani*, pls. 3 and 6: A. Da Sangallo, Uffizi, no. 949, 1634; *Cod.Barb.Lat.*, no.4333 from Yegül (1992) p.137. Yegül (1992) p.137 notes that the baths of Nero were likely the first to have a symmetrical plan and afterwards all other imperial *thermae* would follow this design.

[80] Yegül (1992) p.138. On either side of the *exedra* were smaller rooms.

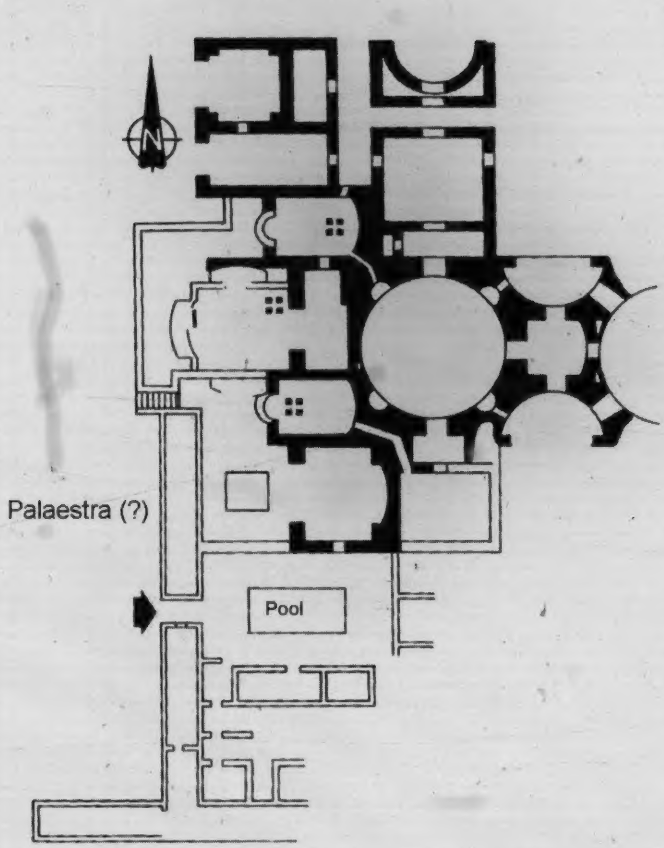

Figure 2.12: Plan of Baths of Agrippa at Rome (Scale 1:1000)

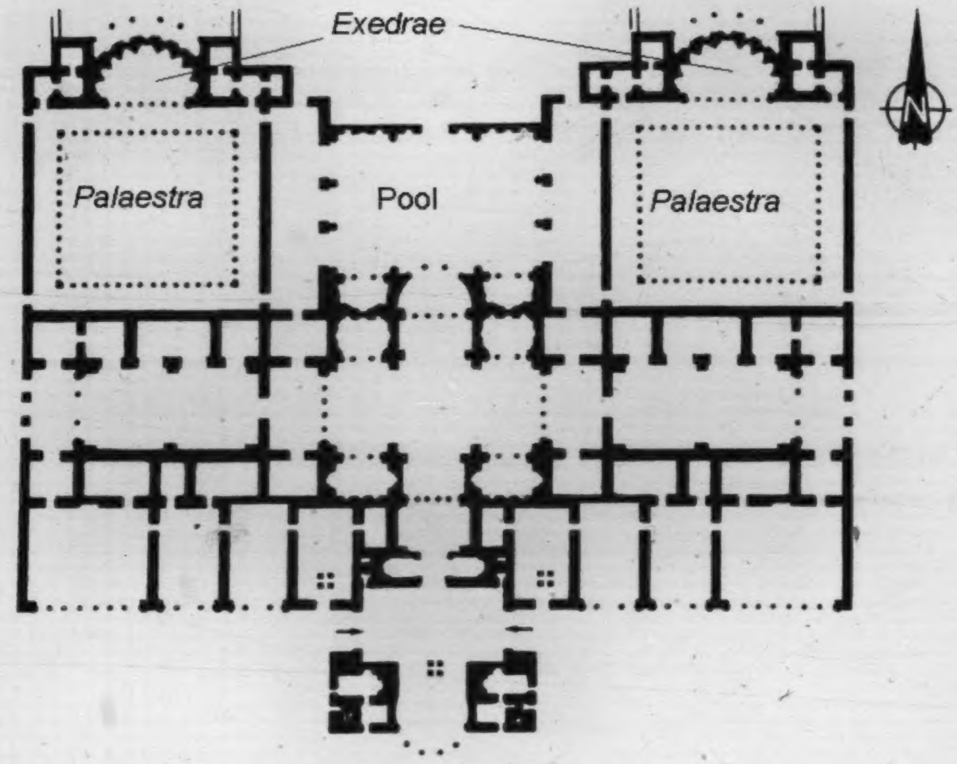

Figure 2.13: Plan of Baths of Nero at Rome (Scale 1:1000)

Although there is little archaeological evidence available, it is clear that by the mid-1st century AD, *palaestrae* in imperial baths were similar to *palaestrae* from the 1st century BC. They were open courtyards, surrounded by colonnades and connected to rooms for bathing.[81] With the Baths of Nero, two *palaestrae* were constructed instead of one. This new design was done likely in order to either increase the grandeur of the baths, make the baths more symmetrical, or both. Whatever the reason, both maintained the typical form of *palaestrae*, with the exception of an *exedra*. The presence of an *exedra* suggests that the *palaestra* regained one of its previous functions, that of intellectual study. The *exedra* may have acted like the *ephebeum*, as it was not used as a room for bathing. This of course is only speculation, but as Nero was deeply interested in Hellenic culture he may have included an *exedra* in order to emulate the Greek *palaestra*.[82] It is also interesting to note that having an allotted amount of space, the shape of the *palaestrae* was made square, which closely followed that of the Hellenistic examples.

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[81] Although there is no evidence for columns in the *palaestra* in the Baths of Agrippa, one would suspect there would have been, as all *palaestrae* studied thus far had them.

After the emperor Nero, however, the design of *palaestrae* changes slightly. This is first apparent in the Baths of Titus, completed in AD 80 (Figure 2.14). There is very little remaining, but from the drawings of this structure made by Palladio around 1540, it is possible to construct the plans of these baths. There were two square-shaped *palaestrae* located in the north at the edge of the baths with the central area measuring 15 m by 12 m, and surrounded by arcades on small, square piers. Although seemingly similar in form, there is the possibility that the courtyards were roofed rather than typically open.[83] This difference has made some question their identity, with Nielsen believing they are *palaestrae*, and Krencker identifying them as change rooms.[84] These baths also have two large open areas in the south, which Yegül suggests could have been used as an exercise yard and garden.[85]

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[82] Newby (2006) p.30.

[83] Nielsen (1990) p.46, n.74 believes that they were open, while D. Krencker, E. Krüger, H. Lehmann, and H. Wachtler, *Die Trierer Kaiserthermen* (Augsbourg, 1929) p.265 believes they were covered.

[84] Nielsen (1990) p.46 and Krencker (1929) p.265. Yegül (1992) p.142 feels that they could be either *palaestrae* or change rooms.

[85] Yegül (1992) p.139. Although there are no measurements these two large open areas also appear to be square-shaped.

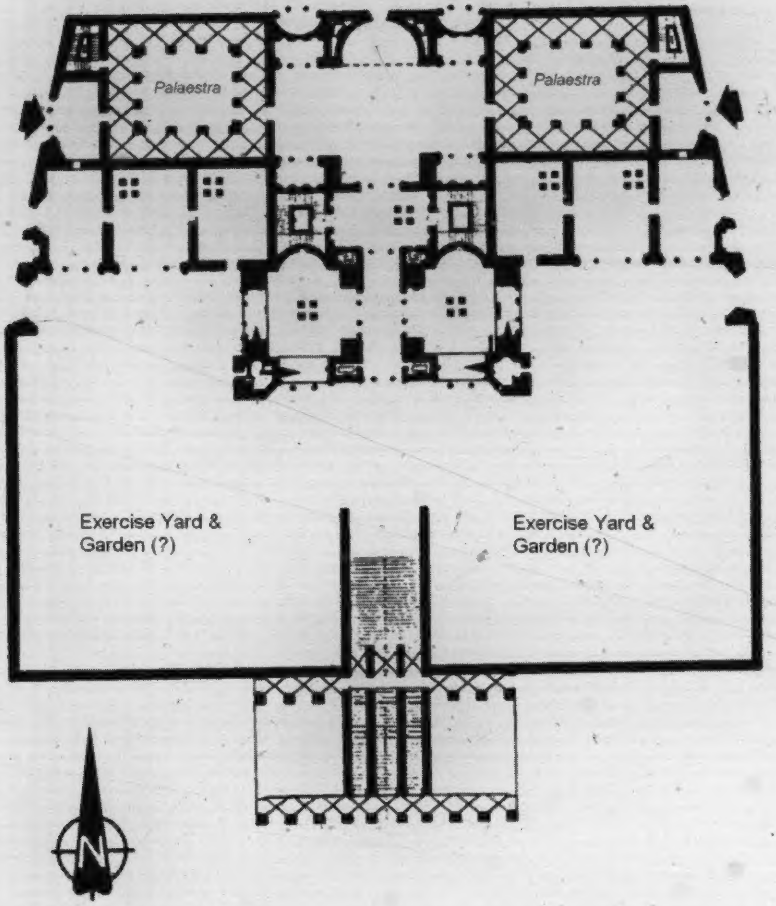

Figure 2.14: Plan of Baths of Titus at Rome (Scale 1:1000)

These alterations are also found in the Baths of Trajan (Figure 2.15), dedicated in AD 109, which "brought the architectural development of imperial *thermae* to maturation."[86] Once again very little is left; however, enough remains to compare it to drawings done in the Renaissance period and the few fragments of the *Forma Urbis Romae*.[87] In these baths the *palaestrae* are rectangular, surrounded by a row of columns, and have *exedrae* placed on the long side. Nielsen believes that these *palaestrae* were roofed because it seems unlikely that bathers would be forced to travel from the changing rooms into the bathing rooms during the winter months in Rome.[88] Another imperial bath similar to these but on a much larger scale is the 3rd century AD Baths of Caracalla (Figure 2.16). They also have two *palaestrae*, both rectangular, surrounded by colonnades, and although each has an *exedra* it is located on the inner side of the *palaestra* rather than the outer. Like the Baths of Trajan, there is also debate on whether or not these *palaestrae* were roofed.[89]

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[86] Yegül (1992) p.142.

[87] The *Forma Urbis Romae* is a marble city map of Rome made at the beginning of the 3rd century AD: Nielsen (1990) p.49.

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[88] Nielsen (1990) p.50. She suggests instead that these types of rooms should be called *basilicae thermarum* (basilica of the baths).

[89] For a discussion of whether or not these *palaestrae* were roofed see for example Krencker (1929) pp.274-276, Nielsen (1990) p.54 and Yegül (1990) pp.160-162.

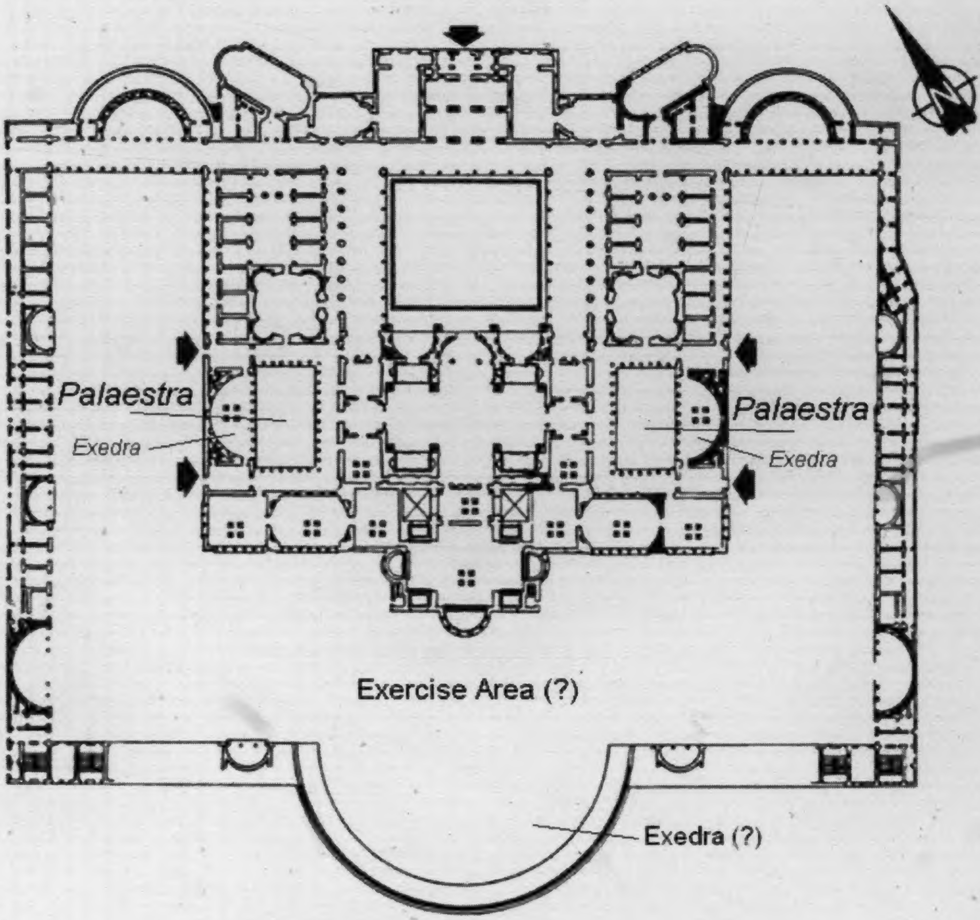

Figure 2.15: Plan of Baths of Trajan at Rome (Scale 1:2000)

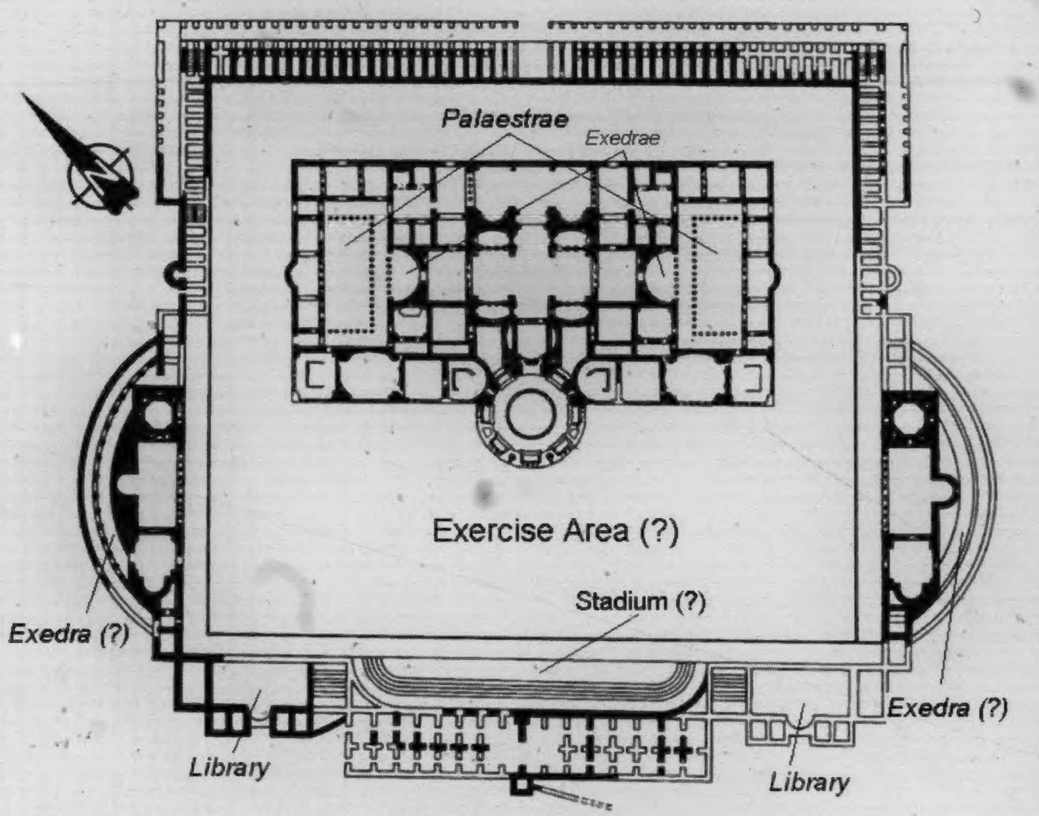

Figure 2.16: Plan of Baths of Caracalla at Rome (Scale 1:3000)

It is clear that the *palaestrae* in both of these baths followed the design established in the Baths of Titus; however there was the return of one early design feature, the introduction of a new design innovation and a possible change of function for the *palaestra*. The first was the relocation of *palaestrae* back into the centre of the baths. For the first time, in both the Baths of Trajan and the Baths of Caracalla, the *palaestra* was not situated at the edge of a complex. In the Hellenistic period the *palaestra* was the central space, with rooms along its edges, with bathing playing a minor role. By the 1st century BC bathing facilities became more important and the *palaestra* was moved to the outside of the baths. Although it was still a part of the overall structure, it almost appeared as a facility separate from the bathing rooms. Those exercising in the *palaestra* could avoid those bathing if so desiring. In the Baths of Trajan, the *palaestra* was placed among the bathing rooms, becoming an integral part of the structure and allowing bathers and exercisers to see and interact with one another. Therefore, although the form of *palaestrae* appears to have continued, with a few changes, their function may have changed entirely. They could continue accommodating discussion and study, but if roofed they were less suitable for exercise.[90] It was more appropriate to exercise in an area, open to the sky and large enough to provide ample space for physical exercise.

The new design innovation was that given a generous amount of space, the *palaestra* was redesigned with a rectangular form. Although it was shown that some early Italic *palaestrae* were irregularly shaped, it was hypothesized that the lack of available space is what determined this. This idea was validated when compared to *palaestrae* that were constructed where space was not an issue. In these examples, *palaestrae*, for the most part, were square-shaped, which closely resembled Hellenistic examples. However, in the baths of Trajan and Caracalla, the *palaestrae* were rectangular.

The possible change of function for the *palaestra* was connected to the creation of a peripheral ring around both baths, which Yegül argues was an attempt to recreate elements of the Greek gymnasium.[91] He feels that this area was likely lined with trees and acted as a garden and exercise area. Around the peripheral area were colonnades, *exedrae*, a latrine and various other rooms acting as areas for activities such as exercise, lectures, reading and changing.[92] In the Baths of Caracalla there were also two large *exedrae* and a stadium-like facility, which had libraries on either side.[93] All of these features are reminiscent of Hellenistic *palaestrae*, as well as the Vitruvian model. It appears that some physical exercises were transferred from the *palaestra* in imperial baths to these open areas.[94] It was much easier to exercise outside where space was more accommodating. This meant that the *palaestra* in the centre of imperial baths became more of an area for socializing and decorated lavishly with mosaics and sculpture, such as in the Baths of Caracalla.[95]

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[90] Of course any room in a bath could realistically be used for discussion and study if so desired. Roofed *palaestrae* would have made the space hotter without constant airflow, as well as much louder. Other design innovations were the placement of the *frigidarium* in the centre of the baths and the introduction of a large, open-air swimming pool. The latter innovation was however not entirely that new because the Stabian Baths at Pompeii had a swimming pool constructed during the 1st century AD.

[91] Yegül (1992) p.142. J. Carter, "Civic and Other Buildings" in I.M. Barton (ed) *Roman Public Buildings* (Exeter, 1989) p.52 agrees with this idea.

If the *palaestra* inside imperial baths underwent changes in form and function, did this occur also in smaller baths as well? A few examples to examine are the mid-2nd century AD Baths of Neptune (Figure 2.17), Forum Baths (Figure 2.18) and Terme di Porta Marina (Figure 2.19) from Ostia.[96] All three had their *palaestra* located on the edge of the baths, were open to the sky, had columns around the courtyard, and opened into other rooms. One was rectangular in shape, with the others being irregular, and all were located in different parts of the bath.[97] Like the *palaestrae* from the 1st century AD, these three all have the same characteristic features, except for shape, in their design. The function of these *palaestrae* also appears to continue, as there are bathing facilities, space for exercise and rooms providing a variety of unidentified roles, which likely included discussion and study.[98]

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[92] Yegül (1992) p.142.

[93] Nielsen (1990) p.53 suspects that there were seats on the south side of the stadium for spectators.

[94] Exercises such as playing ball, stretching, walking, etc., could still be done in these *palaestrae*. However these types of exercises could be done anywhere in the baths, if space allowed.

[95] See J. Delaine, *The Baths of Caracalla: A Study in the design, construction, and economics of large-scale building projects in imperial Rome* (Portsmouth, 1997) for more information on the Baths of Caracalla, including the artwork found inside.

[96] Although R. Meiggs, *Roman Ostia* (Oxford, 1973) p.415 calls these three examples imperial baths, he does not believe they were paid for by any emperor. The imperial baths mentioned above all cover more than 10,000 m², while the three from Ostia all cover less than 5,000 m². See Nielsen, vol.2 (1990) pp.2-6 for the measurements of these baths.

[97] Meiggs (1973) pp.409-415, Fagan (1999) pp.170-173, Yegül (1992) pp.80-81 and Nielsen (1990) p.52.

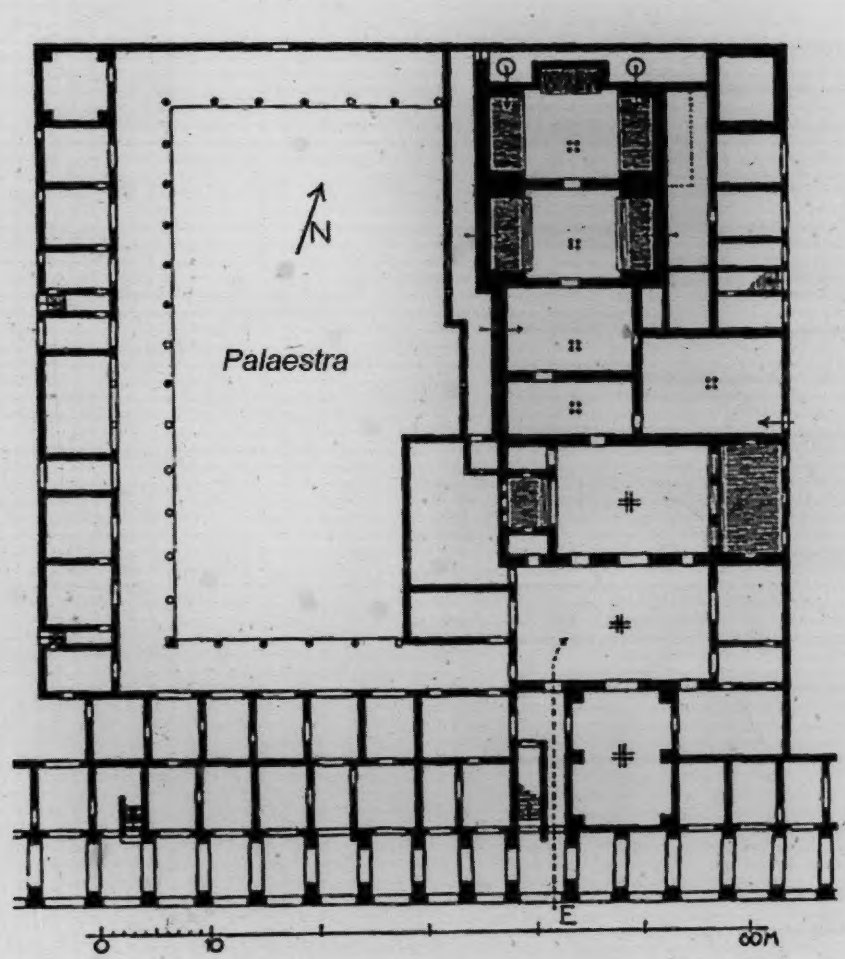

Figure 2.17: Plan of Baths of Neptune at Ostia

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[98] Meiggs (1973) p.410 believes that the rooms in the Baths of Neptune may have had something to do with physical exercise because of their proximity to the *palaestra*.

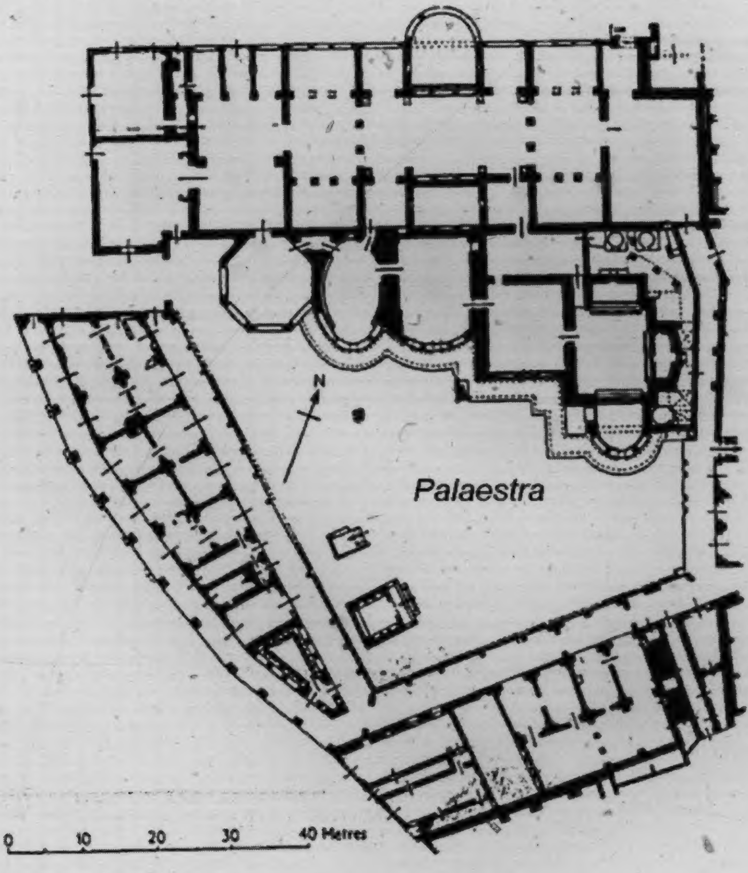

Figure 2.18: Plan of Forum Baths at Ostia

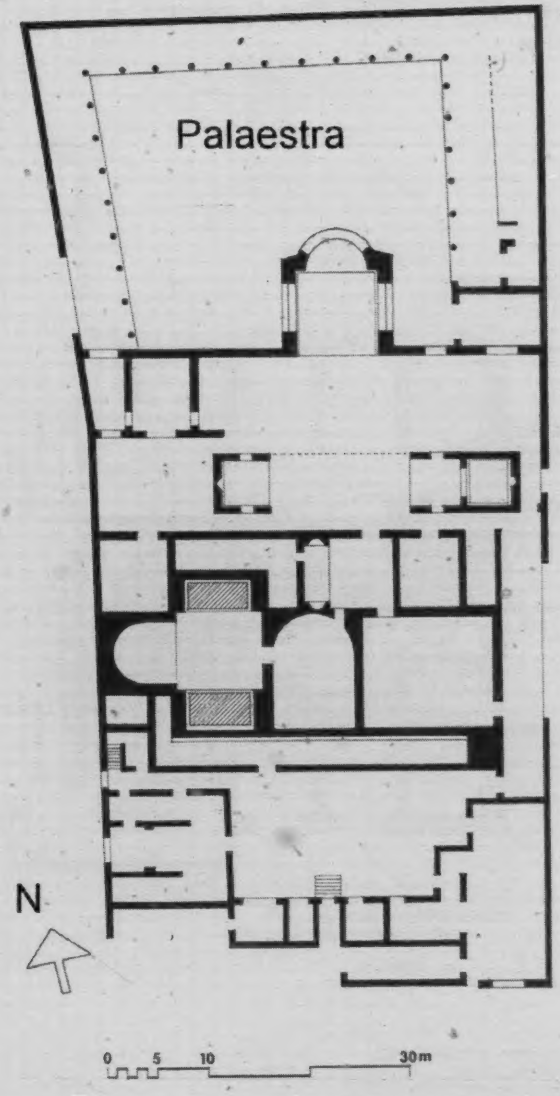

Figure 2.19: Plan of Maritime Baths at Ostia

The evidence from the Roman Imperial period indicates that except for their shape, *palaestrae* in Italy maintained their form and function from the 1st century BC. They continued to be open courtyards, surrounded by colonnades and a variety of rooms, and located at the edge of baths, but adopted the rectangular shape of the *palaestra* found in imperial baths. However, in the *palaestrae* of imperial baths we do see a change in form and function. Although the form of *palaestrae* in imperial baths is basically the same as those in smaller baths, they are rectangular, moved from the edge of the baths into the centre, and perhaps become roofed. They also appear to have lost their function as areas for some types of exercises. Athletic exercise was better suited in the large open spaces around the main bath complex. With rooms opening into this open space and, in the case of the Baths of Caracalla, the inclusion of a stadium, the imperial bathing establishments harkened back to the Greek gymnasium. However, this type of bath was only seen in these large imperial establishments and not the majority of other baths.

Conclusion

By examining the evolution of Hellenistic, as well as Italian *palaestrae*, and comparing them to the Vitruvian *palaestra* model, a clearer picture of their form and function begins to emerge. The early form of Hellenistic *palaestrae* consisted of a square-shaped open courtyard, surrounded by columns with rooms located around the perimeter. The number and location of these rooms were all different, but each *palaestra* at the very least had facilities capable of providing an area for discussion, exercise and cold water bathing. Nearby, but located outside this main structure, was a roofed track for running.

This form was seen in the 5th century BC *palaestra* in the Stabian Baths at Pompeii; however the *palaestra* was never located near any covered running tracks. After the 3rd century BC bathing facilities begin to play a more significant role, normally at the expense of the open courtyard. In Greece rooms for bathing were secondary features of *palaestrae*, but in Italy the *palaestra* became a secondary feature of baths. This in turn likely eliminated the intellectual function of *palaestrae*, as is suggested by the disappearance of rooms meant for study. The courtyard however could still accommodate physical exercise. Therefore when Vitruvius writes his description of a *palaestra* in the 1st century BC, it is a combination of Hellenistic and Italian features. The common characteristics of Roman *palaestrae* are: being located at the edge of a bath with a colonnaded courtyard that was open to the sky, and being connected to a main bath complex. The majority also had a few rooms located around the courtyard, the functions of which differed from *palaestra* to *palaestra*. This form continues in all but the imperial bathing establishments from the middle of the 1st century AD. The differences seen in the imperial baths are that they are rectangular-shaped, located at the centre of the baths, and some become roofed. Their function is also altered, as some types of physical exercises are no longer practiced here. Instead, perhaps, the *palaestrae* in imperial baths are primarily used more for study and socializing. The idea behind this hypothesis stems from the fact that physical exercise is transferred to the exterior of the main bath complex where there is much more open space.

Regardless of these changes in imperial baths, the features of *palaestrae* in all other baths remain the same. As this is the case, it is possible to establish certain architectural features common to all, which can then be used to help identify *palaestrae* in North Africa. The characteristics common to Roman *palaestrae* can be summarized as follows: 1) they are located at the edge of baths, 2) they have a courtyard, 3) they are open to the sky, 4) they are surrounded by columns, 5) they are attached to bathing rooms, and 6) they open into other rooms whose function is not bathing.[99] By using this set of criteria, the *palaestrae* in North Africa will more easily be identified. Once identified a closer examination of their features can commence in order to establish whether or not they closely followed the Hellenistic and Italian form or a unique type of North African *palaestrae* was created.

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[99] Although Roman *palaestrae* appear to have adopted a rectangular shape by the middle of the 2nd century AD, it appears that this was only possible if allotted a certain amount of space. However, as it is impossible to determine whether or not a certain amount of space was allotted for the baths and its *palaestra* until after the *palaestra* has been identified, the rectangular shape will not be used as a defining feature when attempting to identify *palaestrae* in North Africa.

Chapter 3: *Palaestrae* in North Africa: Architecture and Decoration

This chapter will examine the design of North African *palaestrae*. This will include an examination of their size and layout, their orientation within baths, the building materials and techniques used in their construction, the accompanying artworks found within, and the date of their construction. This will help determine whether North African *palaestrae* were individualized, constructed on a specific model, or both. A more detailed examination of each of these *palaestrae* can be found in Appendix Three, which includes a bibliography of each site.

Palaestra in baths

a) Size and layout

i) Size

The size of *palaestrae* varied considerably. The largest North African *palaestra*, at Lepcis Magna, measures around 4400 m^2. The only other one over 4000 m^2 is at Gigthis. Those at Carthage, Lambaesis, Thysdrus, Utica, and Caesarea, are between 1000 m^2 and 3000 m^2.[1] There are many reasons why the *palaestrae* in these communities were large. Firstly, these were all communities with large populations. In the case of Carthage and Caesarea, these were the principal cities of their respective provinces. The other communities were also important regional centres.

The second reason why these seven locations had large *palaestrae* is their location. Except for the communities of Lambaesis and Thysdrus, these communities were all situated on the coast. Their ports attracted numerous visitors, both from the sea and those travelling along the coast.[2] This augmented their already large populations. Thysdrus was not located on the coast, but it was only 40 km away, and easily accessible from coastal cities like Hadrumetum and Leptiminus. As for Lambaesis, it was the only community to have a *palaestra* measuring over 1000 m², which was located far inland. It was established as a military camp and the two *palaestrae* there were, in part, used with the intention of keeping the soldiers fit.[3]

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[1] Although the *palaestra* at Caesarea has not been entirely excavated it likely covered an area over 1000 m^2.

The third reason is that these coastal cities had been more heavily exposed to Greek influence.[4] By the 2nd century AD, if not earlier, they had embraced Greek athletic culture. Carthage and Caesarea both celebrated two Greek-style festivals, which made having large *palaestrae* necessary, as they were the location for athletes to practice and train. Many of these coastal cities, such as Gigthis (Figure 1.7 & 1.8), Lepcis Magna (in nearby Silin) (Figure 1.4), Carthage, Utica (Figure 1.10) and Caesarea, have provided mosaics showing athletic scenes, indicating the presence of an athletic culture.[5] There were also lamps carrying the images of athletes from Carthage and Caesarea.[6] Therefore the existence of large *palaestrae* in these communities is not surprising.

All of these reasons explain why these seven cities had *palaestrae* measuring over 1000 m². All the other *palaestrae* in North Africa measured less than 1000 m² in area. There were seven *palaestrae* between 500 m² and 1000 m², four between 250 m² and 500 m², and five under 250 m². Only at Bulla Regia, where the *palaestra* is only suspected, is there no information regarding its total area. Many factors explain the smaller size of these *palaestrae*. The first is that smaller populations simply did not require enormous exercise areas. The second is that the *palaestrae* in all of these communities had less evidence for Greek-style athletic culture. There is very little athletic imagery found in these communities, with just one athletic mosaic from Thuburbo Maius (Figure 1.5), three lamps from Bulla Regia, and one sculptural relief from Mactaris.[7] There are also only three inland communities, Thuburbo Maius, Thamugadi and Thugga, which have inscriptions suggesting that athletic competitions were held.[8] Other factors that may have played a role when determining the various sizes of these *palaestrae* include the space available for construction; and whether the bath was private, public or for military use.

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[2] Port cities were also more easily accessible for athletes coming from abroad who were competing in local North African athletic festivals. See Chapter One for a discussion on athletic contests held in North Africa.
[3] M. Grant, *A Guide to the Ancient World: A Dictionary of Classical Place Names* (New York, 1986) p.325 notes that there was an adjoining civilian settlement south of the camp.
[4] S. Raven, *Rome in North Africa* (London, 1993) pp.7-11 & 29-31.
[5] With regards to the athletic mosaics from Carthage and Caesarea, they were found in the baths possessing a *palaestra*. For the mosaic at Carthage, see C. Hugoniot, *Les Spectacles de l'Afrique Romaine: une culture officielle municipale sous l'Empire romain* (Paris, 2003), and for Caesarea see K.M.D. Dunbabin, *The Mosaics of Roman North Africa: Studies in Iconography and Patronage* (Oxford, 1978) p.255.
[6] For Carthage see J. Deneauve, *Lampes de Carthage*, (Paris, 1969), #'s 331, 467-470, 674, and 1052. For Caesarea see J. Bussière, *Lampes antiques d'Algérie*, Monographies *instrumentum* 16 (Montagnac, 2000), #258.

ii) Layout

Although *palaestrae* in North Africa varied greatly in size, they are typically one of three shapes: square, rectangular or circular. The majority are rectangular or square, with only a few, such as at Bulla Regia and Cuicul, being irregular rectangles.[9] In trying to determine why there were different shapes, various factors need to be considered. There is no correlation between shape and size. Square and rectangular *palaestrae* are found in both large and small bathhouses. There is also no correlation between shape and location. Whether a *palaestra* was situated on the coast or inland, there are examples of both shapes. Shape was also not determined by city regulations, as Lambaesis has both a square and a rectangular *palaestra*, while Thamugadi has three different configurations.

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[7] For the lamps at Bulla Regia see P. Gauckler & F. Du Coudray La Blanchere, *Cataloque du Musee Alaoui* (Paris, 1897) pp.169-170. There are other North African cities without *palaestrae* that had athletic imagery. See Appendix Five for a list of these cities and the objects found there.

[8] Thuburbo Maius: *ILTun*.718, Thamugadi: *AE*, 1941.46, and Thugga: *AE* 1904.115 = *CIL*, 8.26527; *CIL*, 8.26591; *CIL*, 8.1500-1502 + 15509 = 26458 = *ILAfr*.514; and *CIL*, 8.26606 = *ILS*.9364 = *ILTun*.1434.

[9] Available space likely played a role in the making these *palaestrae* irregular shaped.

The only correlation that exists is between the shape and construction date. With a few exceptions the majority of square *palaestrae* were constructed before the end of the 2nd century AD, while rectangular *palaestrae* were constructed mid-2nd century AD and after.[10] Was this a North African phenomenon, or are there parallels for this change elsewhere in the Roman world? No correlation appears to exist between shape and date similar to that in North Africa in other parts of the Roman Empire.[11] Both square and rectangular *palaestrae* are found from the 1st century AD to the 4th century AD in Spain, Germany, Greece, and everywhere else *palaestrae* have been uncovered.

What reasons are there to explain this correlation? Certainly available space was a factor in determining the shape of North African *palaestrae*, but one other possible explanation exists, and it is connected to the shape of *palaestrae* found in the Imperial Baths at Rome. The earliest Imperial Baths at Rome, those of Nero (Figure 2.13) and Titus (Figure 2.14), had square *palaestrae*. The Baths of Trajan, however, (Figure 2.15) incorporated two rectangular *palaestrae*, and imperial baths after Trajan continued to use this shape.[12] Early North African bath-builders may have emulated the square shape of the earliest imperial baths in Rome, but when the design of *palaestrae* in the imperial baths changed, North African builders appear to have followed suit. This is seen in the

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[10] The two square *palaestrae* constructed after the 2nd century AD were at Thuburbo Maius, dating to AD 225, and Oued Athmenia, dating to a much later period. The *palaestra* at Thuburbo Maius was square likely because it was a late addition to the baths and therefore had to fit in the available space. The *palaestra* at Oued Athmenia was in a villa and its shape may be due to the personal choice of the owner. The two exceptions of rectangular shaped *palaestrae* constructed early in the 2nd century AD occur at Thamusida and Lepcis Magna. Again this shape may be due to the space available.

[11] There is a good catalogue of baths, some with, some without *palaestrae*, in I. Nielsen, *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths*, vol.2 (Aarhus, 1990).

[12] The *palaestrae* referred to here are those found inside, and does not refer to the open spaces outside of the baths, which were assuredly used for physical exercise.

Hadrianic Baths at Lepcis Magna, which had an elongated rectangular *palaestra* which was constructed around AD 127.[13] The rectangular design did not become standard in North African baths immediately, however, as square *palaestrae* continue to be found for another half century, for example in the Antonine Baths at Carthage, which were constructed between AD 145 and 165. At the beginning of the 3rd century AD, however, the rectangular design became normal for *palaestrae* in North Africa.[14]

Although the square and rectangle were the two primary shapes, there were also circular and semi-circular *palaestrae*. The *palaestra* at Gigthis is completely circular, while the one in the Large South Baths at Thamugadi is semi-circular.[15] A third example occurs with the *palaestra* in the Hadrianic Baths at Lepcis Magna. Although it is essentially rectangular, each end is semi-circular. Nowhere else in the Roman Empire are there examples of circular or semi-circular *palaestrae*.

The circular design of *palaestrae* in North Africa reflects the influence of what Lyttelton has called the 'Baroque style' of North African architecture.[16] It is characterized by the use of curving lines, which gives the illusion of movement. This is quite different from classical architecture, which "aims at permanence and repose."[17] Lyttleton believes this Baroque style begins to appear in Roman architecture during the 2nd century AD, brought from the eastern Mediterranean.[18] This would account for the circular *palaestrae*, but as there are only three examples, it suggests that it never became popular, in North Africa or anywhere else in the Roman world. G.C. Picard, however, argues against the idea that curvilinear architecture should be attributed solely to Greek influence and instead argues that local traditions and skills should not be overlooked.[19] The idea that circular *palaestrae* could be a regionalized phenomenon is strengthened by the fact that two of the examples, Gigthis and Lepcis Magna, are both located in the same region of North Africa.

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[13] Date of the baths: *IRT*.361. There was a semi-circle at each end of this *palaestra*. See discussion on the circular *palaestra* below.

[14] Although the most immediate and relevant inspiration for the rectangular shape of *palaestrae* came from the imperial baths, this shape was common among Hellenistic *porticus* and *quadriporticus* buildings, some of which were even found at Rome. See F. Yegül, *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.9-14.

[15] The original *palaestra* in the Large South Baths was rectangular. If this indeed was a *palaestra* then it is dated to the mid-2nd century AD and thus one of the earliest along with Lepcis Magna and Thamusida.

[16] M. Lyttelton, *Baroque Architecture in Classical Antiquity* (London, 1974).

[17] Lyttleton (1974) p.11.

[18] Lyttleton (1974) pp.12 & 15. See this work for examples of structures constructed in a baroque style.

b) Location in baths

Regardless of the shape, the *palaestra* was usually located in the same part of the baths. Out of the 25 *palaestrae* discussed in this study, 19 of them were in the north, east or northeast area of the baths. This appears to be a North African phenomenon, as *palaestrae* in other regions of the Roman world do not seem to favour one particular spot in a bath.[20] The decision to place them in the north, east or northeast area was influenced by the climate of North Africa. Already living in a hot arid region, patrons of *palaestrae* did not need the later-day sun beating down upon them. *Palaestrae* received the early morning sun, but during the afternoon and evening (the usual times for bathing) the sun was shining on the west side of the baths. Depending upon how high the west bath block was, this side of the baths might have blocked the sun's rays from entering the *palaestra*. As Martial explains, physical exercise typically occurred during the eighth hour (2 pm) of the day, and therefore effort had to be made to keep those exercising from the intense heat of the afternoon sun.[21]

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[19] G.C. Picard, « Influences etrangères et l'originalité dans l'art de l'Afrique romaine sous les Antonines et les Sevérès » Antike Kunst 5 (1962) pp.30-41, from Lyttleton (1974) pp.295-296.

[20] At Rome, the Baths of Titus had two *palaestrae* in the south; the Baths of Trajan had one in the west and the Baths of Nero had two in the north. At Ostia, the Terme di Nettuno had the *palaestra* in the west, and the Terme di Porta Marina had one in the north. At Pompeii, the Stabian Baths had a *palaestra* in the south and the Central Baths had one in the west. Although a rather small sample, it suggests that there was no particular preference in Italy compared to North Africa. Alternatively some of the baths in the northern Roman Empire, such as the Large City Baths at Cambodunum, *Raetia*, and the City Baths at Aventicum, *Germania Superior*, had their *palaestrae* situated in the west and south perhaps suggesting an attempt to utilize the sun for most of the day. More research is necessary in order to determine whether or not *palaestrae* in these areas were positioned purposefully, as they seemed to be in North Africa. See Nielsen, vol.2 (1990) for the plates of many baths, which show the location of these *palaestrae*.

The six *palaestrae* not situated in the north, east or northeast, were either in the west or the south of the baths. There are no evident reasons as to why these six were constructed differently from the others, but a few possibilities exist. The *palaestra* at Sufetula was located in the south, but there were baths to the west and east of it. This allowed patrons from either bath access to the area. Therefore its placement was meant to accommodate exercisers from both baths and as a bonus it was still shaded from the hot afternoon sun by the baths to its west.[22] Another example comes from Madaurus, where the *palaestra* is located in the west of the baths and runs along the street. The builders may have deemed it more important to have the *palaestra* situated at the entrance of the baths rather than at the far side.[23] Other factors, such as topography and the existence of pre-standing structures already providing shade, could have determined why these six *palaestrae* were not situated in the east, north or northeast area of a bath.

Two other points common to many North African *palaestrae* were that they were constructed on the exterior of the building and separated from the main baths by a long corridor or many smaller vestibules, which acted as a 'zone of transition'. This is the case at Caesarea, Gigthis, Thuburbo Maius, Thysdrus, in the Camp and Large Baths at

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[21] Martial, *Epigrams* 4.8. This does not mean that all Romans exercised at this time. Even Martial, *Epigrams* 3.36 and 10.70, occasionally had to attend the baths at a late hour. Suetonius, *Augustus* 76.2, also relates a tale about how Augustus' friend had to attend the baths at 6 pm because of work.

[22] The other two *palaestrae* constructed in the south of baths were at Hammam Des Beni Guecha and in the Filadelfis Baths at Thamugadi.

[23] See below for the discussion on how North African *palaestrae* were often the first area citizens entered into from outside of the baths. The other two *palaestrae* constructed in the west of baths were at Bulla Regia and Volubilis.

Lambaesis and in the Filadelfis Baths at Thamugadi. The *palaestrae* that did not have this zone of transition were still separated from the baths by other rooms. This type of arrangement allowed patrons to avoid the bathing rooms if so desired and vice versa.[24] Only at Carthage, Utica and Mactaris were the *palaestrae* not situated on the exterior of the baths. At these three locations they were in the middle of the baths and surrounded by bathing rooms. These *palaestrae* closely resemble the Imperial baths at Rome, such as the Baths of Nero, Titus, Trajan and Caracalla, in as much as they are symmetrical and have two *palaestrae* located inside the structure. It is this resemblance that differentiates them from other North African *palaestrae*.[25]

North African *palaestrae* were also typically separated from the heated section of the baths. The zone of transition provided this separation, but those that did not have this feature were separated from the heated section by the cold rooms. In a few instances change rooms, vestibules and *gymnasia* provided this separation. The probable reason for this arrangement was that it was an attempt to distance the *palaestra* from the heat of the baths. If it shared a wall of a hot room, heat would pass through, making the already sweating exercisers hotter. Maintaining some distance from the heated rooms kept the

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[24] Although this arrangement was typical among *palaestrae* in North Africa, it was commonly found elsewhere in the Roman Empire. See Nielsen (1990) for many examples of baths with their *palaestra* located around the exterior. However some of the earliest *palaestrae* from Italy, such as Pompeii and Herculaneum, were quite often situated in the middle of the baths. See for example the Stabian Baths from Pompeii.

[25] Except for the Imperial baths at Carthage, no others have open areas around the exterior of the main bathing rooms. See J. Delaine, *The Baths of Caracalla: A Study in the design, construction, and economics of large-scale building projects in imperial Rome* (Portsmouth, 1997), Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003), Nielsen (1990) and Yegül (1992) for a discussion on the Imperial baths at Rome. Some of the baths used in this study are also classified as Imperial baths because of their symmetry, but they have their *palaestra* situated around the exterior. Finally there are Imperial baths located in North Africa with no *palaestrae* whatsoever, such as the Large East Baths at Thamugadi and the Large South Baths at Hippo Regius. See Thébert (2003) for a description and accompanying bibliography for these last two examples.

palaestra cooler and made it a more comfortable area in which to engage in physical exercise.

Even though this was normal in North Africa, there are a few baths where a hot room shared a wall with the *palaestra*. When this occurred, attempts were made to decrease the amount of heat entering the *palaestra*. At both Madaurus and Sufetula one wall of the *palaestra* was shared with a service corridor. Although not the most ideal situation the corridor acted as a buffer. Heat from the service corridor still passed through the wall but it was not coming directly from a heated room.[26] There is only one example of a *palaestra* sharing a wall directly with a heated room. This occurs at Volubilis where part of the east wall in the *palaestra* is shared with the hot rooms. However, there is a large pool lying against this wall as well, which absorbed some of the heat coming from the heated rooms. As this was one of the first baths with a *palaestra* constructed in North Africa, one could explain this arrangement as an early experiment before it was intentionally separated from the heated rooms. It seems therefore that when heated rooms were close to or shared a wall with a *palaestra*, attempts were made to minimize the amount of heat seeping into this area. That this was purposefully done in North Africa is strengthened by the fact that *palaestrae* in other parts of the Roman Empire, such as at Aventicum in Switzerland and Kempten in Germany, were not typically separated from the heated rooms of the baths. Unlike in North Africa, where it was much hotter, those using the *palaestra* in the northern provinces probably sought the heat emanating from the heated rooms.[27]

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[26] In the case at Sufetula it is only the smaller baths to the west that the *palaestra* shares a wall with the heated rooms. Cold rooms separate the heated rooms of the larger baths east of the *palaestra*.

[27] See Nielsen (1990) for the plans of these baths.

Another element common to most *palaestrae* in North Africa is their close proximity to cold pools.[28] It was noted that cold rooms were constructed next to *palaestrae* in order to keep the heat from hot rooms from penetrating into these areas. An added benefit of this arrangement was that patrons were closer to facilities used for cooling down. The most advantageous amenity was the cold pool, where one could plunge into the waters to cool down. In some cases, such as the baths at Volubilis, Hippo Regius, and the Filadelfis and Sertius Baths at Thamugadi, the *palaestra* had its own cold pool.[29] This was not typical however as the majority of cold pools were usually situated in or very near the *frigidarium* and were therefore at most separated from the *palaestra* by a few rooms.[30] Often one of these rooms was a small corridor or an appendage of the *frigidarium*. Examples of this occur in both of the baths at Lambaesis and the Large Baths at Caesarea. At a few other baths, such as at Sufetula, Thamusida and Lepcis Magna, the *palaestra* opened directly into a cold pool. In every North African *palaestrae* a cold pool was within close proximity.

One feature, which only two *palaestrae* had, was permanent benches. Benches lined the walls of the colonnaded walkway at Sufetula and the Large East Baths at Thamugadi. At both sites the benches were made of stone, with some of those at Sufetula actually being attached to the walls. Although there are only two examples from North Africa, it is plausible to assume that most colonnaded walkways had some type of facility for sitting and resting. Temporary or portable wood and marble benches could have been placed along the walls. The advantages of having benches lining the walls of the *palaestra* are many. Lucian, in a hypothetical discussion, has Anacharsis telling Solon that they should go and sit in the shade where there were benches in order to get away from the athletic activity.[31] Benches provided a place for rest, or for socializing and therefore were likely included in most *palaestrae*.

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[28] Lucian, *Baths of Hippias* 8, says that there was direct access between the *palaestra* and the hall with a cold pool, as this was most convenient.

[29] It is uncertain whether these pools were for cooling off and washing or for swimming. Yegül (1992) pp.37-38 argues that most pools in baths were not deep enough for swimming, but rather likely used for splashing and wading. Instead he points out that most swimming was done in the rivers or sea. See for example Plutarch, *Cato Major* 20.4-5 and Horace, *Odes* 3.7.25. This does not mean, however, that swimming could not take place in baths. Cassius Dio, 55.7.6 refers to a heated public swimming pool in Rome. Regardless of the depth it seems possible that people could swim laps in the pools of baths provided that there was enough space to do so.

[30] This same arrangement is found throughout the Roman Empire.

One final common trait among North African *palaestrae* was that they had their own entrances connecting from the streets.[32] In some cases, such as at Lepcis Magna, Thamusida, Madaurus, Oued Athmenia and the Filadelfis Baths and Marché De Sertius Baths at Thamugadi, the primary entrance of the entire baths was into the *palaestra*. These were not the only entrances, however, as there were other ways into the baths, which allowed patrons to bypass this area. If the primary entrance was not located in the *palaestra* there was at the very least a secondary entrance. Otherwise there were only three *palaestrae* that did not open directly onto a street. At Sufetula and Volubilis there were only a few rooms separating the street from the *palaestra*. These rooms were not for bathing but rather vestibules whose function remains unclear. The third example occurs at Thugga where the rooms between the street and the *palaestra* were for bathing. Poinssot believes the reason there was no direct entrance into this *palaestra* was due to the topography.[33] It seems in North Africa that it was important that citizens had direct access to the *palaestra* from the street. The easiest way to accommodate this was constructing the *palaestra* on the exterior of the bath with an entrance coming from the street. If this was not possible the fewest rooms between it and the outside was the next best scenario.[34] Unlike some of the other features, this one was very typical among *palaestrae* found elsewhere in the Roman world.[35]

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[31] Lucian, *Anacharsis* 16. In this treatise the two men are watching athletic activity occurring in a gymnasium, but the description Lucian gives of the structure they are in resembles very closely that of the *palaestra*.

[32] Besides the three *palaestrae* that were located within the interior of the baths, and therefore did not directly open onto the streets, there are five baths (the baths at Bulla Regia, Caesarea, Hammam Des Beni Guecha, Thysdrus and the Large Baths at Lambaesis) used in this study that are omitted. There is a lack of archaeological evidence regarding the *palaestrae* of these baths and therefore it is not possible to determine whether or not they had entrances leading directly outside.

[33] C. Poinssot, *Les ruines de Dougga* (Tunis, 1958) p50.

c) Individualized features of *palaestrae*

Not everything in the layout of North African *palaestrae* was the same. Two elements that differed in each were the proximity of a latrine, and the presence of rooms that opened into the *palaestra*. The latrine was one facility that most baths required for obvious reasons. Nine of the baths used in this study have not provided evidence for a latrine located on the premises, but with the exception of Mactaris, Thugga and Volubilis, these are still not completely excavated.[36] Out of the remaining 16, nine had their latrines either in nearby rooms or rooms that opened into the *palaestra*. For instance the *palaestra* opened into the latrine at Gigthis and at the Large East Baths at Thamugadi, while at Cuicul and Lepcis Magna the latrine was only a room or two away. Perhaps being open to the sky had the added benefit of saving the olfactory senses from any smells emanating from the latrine. The proximity of the latrine to the *palaestra* does not appear to be contingent on the size of the bath or *palaestra*, as this varied greatly.[37]

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[34] It also almost appears that the *palaestra* acted like a kind of buffer between the bath complex and the street outside. Perhaps this is why the term portico was used as a word to label a *palaestra*. A portico was usually located at the entrance of a building. See the discussion of the meaning of the word *palaestra* in Appendix Two.

[35] See Nielsen (1990) for more examples of this arrangement.

[36] In the case of Volubilis there was a latrine along the outside of the west wall of the baths. See É Lenoir, *Les thermes du nord à Volubilis, recherecbes sur l'époque flavienne au Maroc*, thèse de doctorat, (Paris-Sorbonne, 1986) p.33.

The second way in which *palaestrae* were individualized was in the number and design of the rooms which adjoined them. Although latrines did account for some of these rooms there were other rooms as well. Examples of *palaestrae* with these adjoining rooms occur at Gigthis, Lepcis Magna, Thugga, Thuburbo Maius, Hammam des Beni Guecha, the Large Baths at Lambaesis and the Filadelfis Baths at Thamugadi.[38] The location, size, as well as the number of these rooms differed at each site. One type of this room is a semi-circular exedra, found at Gigthis and Lepcis Magna.[39] At Gigthis there were three *exedrae* placed around the *palaestra* while at Lepcis Magna there were two situated to the north. The information regarding the interior of these *exedrae* is sparse at Gigthis indicating only that they were paved. The evidence at Lepcis Magna is better however as both *exedrae* contained statues as well as porticoes, with a bathtub in the east one. Although it is unclear what functions any of these spaces had, based on the remains, some of the possibilities include areas for decoration, relaxation and discussion.[40] Two semi-circular *exedrae* were also found opening into the *palaestrae* at Mactaris. These do not appear to provide any bathing functions and it is therefore reasonable to assume that they functioned as a part of the *palaestra*. Their similarity in shape to the *exedrae* at

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[37] The *palaestra* at Gigthis measured 4000 m² while the one in the Large East Baths at Thamugadi was only 700 m². Therefore it seems that other factors determined the location of latrines within baths and whether there was one nearby or not.

[38] The Large South Baths at Thamugadi could be included on this list if one refers to the first *palaestra* that was constructed, which later became a gymnasium. This area had an exedra to its east similar in design to that at Lepcis Magna and Gigthis. See these baths in Appendix Three for a more detailed discussion. Incomplete archaeological work on some *palaestrae*, such as at Caesarea and Thysdrus, may also have had adjoining rooms but more excavation is needed in order to determine this.

[39] The semi-circular shape is again tied to this region. See above for the discussion.

[40] See Chapter Four regarding the function of these rooms.

Gigthis and Lepcis Magna points to a similar design and thus its connection to *palaestrae*.

The majority of adjoining rooms however were not semi-circular but rather square and rectangular spaces of varying sizes. Like the *exedrae* these rooms also belonged to *palaestrae* as they opened right into them. Examples occur at Thugga, where there was a very small room in the northeast corner; at Gigthis, where there was a small cubicle to the north; and at Thuburbo Maius, where the south wall was lined with small rooms. The Large Baths at Lambaesis and the Filadelfis Baths at Thamugadi also had rooms to the west and east respectively.[41] Even the *palaestra* at the rural site of Hammam des Beni Guecha had small cubicles, measuring 3 m by 4 m, lining the east and west walls. None of these rooms provides enough evidence to indicate their function, although those at Hammam des Beni Guecha may have acted as spaces for massages or lodgings.[42] In general, one can only suppose that these adjoining rooms provided some function associated with the *palaestra*.

d) Construction of *palaestrae*

Opus africanum was the standard building technique in North Africa during the Roman period.[43] It is therefore not surprising to find it applied in the construction of the majority of the baths and their *palaestrae* used in this study. It was not, however, the only building method used in the construction of North African *palaestrae*. Four other different techniques can be identified. These were *opus vittatum*, *opus quadratum*, *opus*

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[41] See Appendix Three for the specifications of the *palaestrae* at these baths and their adjoining rooms.
[42] Thébert (2003) p.204 argues for the idea of lodgings.
[43] This technique used massive horizontal and vertical dressed masonry blocks, containing panels of smaller masonry blocks, mud brick, or faced concrete over top a concrete core. J-P. Adam, *Roman Building: Materials and Techniques*, Trans. A. Mathews (London, 1994) p.121.

testaceum and *opus incertum*.[44] The choice of technique differed at each location, as each city appeared to favour one particular method. For instance the baths in Thamugadi were all constructed using brick-faced concrete (*opus testaceum*).[45] At Lambaesis, on the other hand, the baths were built in *opus africanum*.[46] The technique used for the construction of baths and their *palaestrae* likely depended upon the architect, as well as the availability of materials. It is also important to note that these building techniques did not correlate with any specific time period. *Opus africanum* was used in the 1st century AD at Volubilis and as late as the mid-3rd century at Thugga.

Although some of the *palaestrae* included in this study are very inadequately published, others show that there was no single building material used in their construction. Instead the type of building materials used was likely based on available funds and proximity to resources. Local limestone was used for capitals, bases and columns at Volubilis; the capitals at Thuburbo Maius; and the stones for the path at Lepcis Magna. Diorite was used for the columns at Caesarea; yellow marble from Chemtou was used for the columns at Carthage; and Cipollino marble was used for the capitals at Lepcis Magna. Each place differed, indicating that there was no uniformity regarding the building materials used in the construction of *palaestrae*.

One puzzling construction feature of *palaestrae* is their floor coverings. The inner court of the *palaestra* was primarily an area for physical exercise and therefore one would expect that the floor of this area would be kept soft for rolling and falling.[47] Lucian (mid 2nd century AD) says athletes wrestled in either mud or sand and Galen (mid to late 2nd century AD) mentions that exercise could occur indoors, outdoors or in mixed shade.[48] R. Katzoff thus concludes that wrestling in mud and sand took place in the central court of the *palaestra*.[49] Naturally these activities could occur outdoors where sand and mud were found in abundance but it is reasonable to assume that the floors of the inner court could be covered with sand and dirt to accommodate these activities.[50] The inner court floor of the *palaestra* at Gigthis consisted of sand, while the floor at Volubilis was of beaten earth. Unlike these two, the floors at Oued Athmenia and Thamusida were not paved, suggesting that they may have just been earthen floors. At other sites such as Sufetula, Thuburbo Maius and the Large East and Filadelfis Baths at Thamugadi, there is no mention in the archaeological reports of the floor covering of the inner court. There is however some mention of the paved walkways surrounding this area.[51] Failure to mention the type of floor covering for the inner court but not the walkways strongly suggests that there was nothing paving the former. This would suggest that these floors were simply beaten earth.[52] Therefore it may have been very common for the inner courts of *palaestrae* to consist of either earth or sand. Having earthen floors and being open to the sky, helped the *palaestra* mimic the elements found outside.

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[44] The *opus incertum* technique involved using irregular shaped and uncut stones placed over top a concrete core. The other techniques are described below. See Adam (1994) for a more in-depth discussion on the different Roman building methods.

[45] Only the Large South Baths combined this method with the *opus quadratum* technique, which used square blocks of stone set in parallel courses, without the use of mortar.

[46] The Camp Baths also used the *opus vittatum* technique, which used square (but not always) blocks that were intersected by one or more brickbands at regular or irregular distances.

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[47] Rolling and falling were activities performed by wrestlers and boxers. See Chapter Four for the discussion regarding the function of *palaestrae*. Lucian, *Anacharsis* 28 says that sand and clay surfaces were provided because it was softer and safer.

[48] Lucian, *Anacharsis* 28-29 and Galen, *De Sand. Tuend.*2.8.

[49] R. Katzoff, "Where did Greeks of the Roman period practice wrestling?" *AJA* 90 (1986) p.438.

[50] It is also possible that mats were placed on the floor in order to soften falls. The weaving of mats extends as far back as the 12th Egyptian dynasty. See M.S. Dimand, *The Metropolitan Museum of Art Bulletin*, New Series, Vol.1, No.1 (Summer, 1942) pp.76-79.

[51] The walkway around the *palaestra* at Lepcis Magna is also paved, but in this case it was paved with marble and not mosaic. See below for the discussion regarding the walkways.

[52] The lack of mention may also be due to the incomplete excavation of the inner court.

This was not always the case, however, as there are examples of *palaestra* courts being completely paved. Although not ideal, physical exercise could still occur on a paved surface. Vitruvius notes that athletes would exercise on paved walkways during the winter, showing that this type of surface was suitable if the circumstances required it.[53] There was a concrete paved floor at Thugga and Hippo Regius, a limestone floor at Cuicul and Mactaris, and a mosaic-paved floor at Carthage.[54] Whether these inner courtyards were originally paved, or paved later is impossible to determine, although the black and white mosaics at Carthage are attributed to the first stage of decoration and are therefore a part of the initial design.[55] Because physical exercise could sometimes occur on a paved surface, the issue of paving the inner court was inconsequential. It did not affect athletes because they were used to exercising on hard surfaces. It is possible that these floors were covered with sand in order to soften the contact of bodies falling to the floor.[56] Regardless, very few *palaestrae* had inner courts that were paved.

The most interesting and unique *palaestra* is at Lepcis Magna. Unlike any other, the inner court here consists mostly of earth but also has four intersecting limestone paths running through it. There are a few possible explanations for placing paths right through the area where physical exercise occurred, including the paths being late additions, or the function of the area being for something else besides physical exercise.[57] However, even with the intersecting paths, the inner court still possessed a large amount of unpaved ground suitable for physical exercise and therefore the paths may actually belong to the original design of the *palaestra*.

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[53] Vitruvius, *De Architectura* 5.11.4.

[54] No mention is made on the type of concrete floor that paved the *palaestra* at Hippo Regius.

[55] M.A. Lézine, *Les Thermes d'Antonin* à *Carthage* (Tunis, 1969) p.33, M.A. Lézine, *Carthage. Utique : Études d'architecture et d'urbaniseme* (Paris, 1968) p.42 and A. Ben Abed Ben Khader *et alii, Corpus des mosaiques de Tunisie, IV, Karthago (Carthage) 1, Les mosaiques du parc archeologique des thermes d`Antonine* (Tunis, 1999) pp.2 & 9.

[56] Although in the case at Carthage, if covered with sand one would not be able to see the mosaic-paved floor.

[57] See Appendix Three for a discussion on the Lepcis Magna *palaestra*, acting as a part of the urban plan.

Unlike the inner courtyard, the porticoes of most *palaestrae* were paved. This was the area typically used for rest and relaxation and therefore its floors did not have to be soft.[58] Consequently, where evidence is available, it shows that mosaics were usually used to cover the floor under the portico. This occurs at Carthage, Mactaris, Sufetula, Thugga and the Large East, Marché De Sertius and Filadelfis Baths at Thamugadi. This was not the only form of floor covering, as marble paved the walkways at Lepcis Magna and Thuburbo Maius, while concrete covered the entire surface of the *palaestra* at Hippo Regius. Although there are gaps, there is enough evidence to make the determination that the inner courtyard of *palaestrae* normally consisted of sand or earth, while the surrounding walkway was paved.

e) Dates

The construction date of each *palaestra* is hypothesized to be the same as the baths with which it is associated. This is because most *palaestrae* clearly belonged to the overall design of the bath complex and are all connected via doors or corridors. There are only two examples in this study where the evidence indicates the *palaestra* was a later addition to the baths. There are also a few examples where a *palaestra* existed at one time but for one reason or another was significantly altered or demolished in order to build other bathing facilities. When this occurred it happened some time after the initial construction of the baths. In these cases one can only surmise that the *palaestra* belonged to the original design of the bath and therefore is dated as such. Other than at Hammam Des Beni Guecha, there is some evidence to estimate a construction date for every other *palaestra*.

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[58] Of course, Vitruvius did note that athletes could practice in this area during the winter in *De Architectura* 5.11.4. Never-the-less Vitruvius does say that this area was still paved.

Most *palaestrae* in North Africa were constructed between the mid-2nd and early 3rd centuries AD. The earliest *palaestra* constructed was in the 1st century around AD 70-80 at Volubilis. It was significantly altered at the beginning of the 2nd century, but continued to function as a *palaestra* until the end of the same century. This is somewhat unusual because this was when most other *palaestrae* in North Africa were being constructed. After Volubilis, the majority of *palaestrae* were constructed within a 75-year span between AD 150 and 225.[59] The only *palaestra* known to have been constructed before AD 150 is at Lepcis Magna. This was built during the 120's.[60] The *palaestra* was an area used for physical exercise and therefore it is not surprising to find them in many communities. However the period when most *palaestrae* were constructed coincides with the fact that athletics in North Africa began to be given more frequently.[61] It suggests that athletes used *palaestrae* for exercise, as well as for training before competing in the festivals held throughout the region.

All of the *palaestrae* identified in North Africa were incorporated into baths, or in the case at Oued Athmenia, a villa with a bath. In two instances however they were a later addition. One is the Summer Baths in Thuburbo Maius. This bath did not originally have a *palaestra* but one was attached at the east end in AD 225.[62] The other example occurs at Thamugadi in the Large South Baths, which were enlarged around AD 198. The original design of the bath had a *palaestra* but it was transformed. Instead a new one was constructed to the north of the baths. It is apparent that this new *palaestra* was not originally a part of the structure because a street runs between it and the baths. Both examples show the necessity of having *palaestrae* incorporated into North African baths by the 3rd century AD.

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[59] A few may have been built a little after this date, like the Memmian Baths at Bulla Regia, but for the most part they fall into this time span.
[60] *IRT*.361.
[61] See Chapter One for the evidence regarding the increased frequency of athletics being held in North Africa. See Chapter Four for the function of *palaestrae*.
[62] *ILAfr*.271.

The construction and maintenance of baths with *palaestrae* became less frequent after AD 225 but it did not cease. The Large Baths at Sufetula incorporated a *palaestra* in their design in the mid-3rd century AD and the *palaestra* in the Licinian Baths at Thugga was restored around 260 AD.[63] By the 4th century AD some *palaestrae* were demolished or significantly altered. At Bulla Regia the *palaestra* was demolished and a latrine and *cryptoporticus* were constructed in its place around AD 360. Around the same time the *palaestra* at Madaurus became used as a cemetery. The *palaestra* at Thugga was completely demolished and replaced with cisterns. Although there is no date to indicate when this occurred, the baths were constructed around AD 200 and therefore this must have occurred later, perhaps in the 4th century AD. Again the alteration or removal of *palaestrae* from baths coincides with the change in athletic culture. It appears that large athletic festivals were no longer being held because in AD 376, the proconsul (governor) of Africa requested from the emperors that he be allowed to restore athletic competitions.[64] This suggests that as athletes no longer had competitions in which to compete, training grounds, such as *palaestrae*, were no longer necessary. Recreational exercise for non-athletes was therefore transferred to other structures, or simply to open ground.

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[63] It is also possible that the Licinian Baths were constructed in the mid-3rd century. See the Licinian Baths in Appendix Three for the discussion. In either case it shows that *palaestrae* were still constructed after AD 225.

[64] *Cth.*15.7.13. See Chapter One regarding the end of athletics in North Africa.

f) Artworks in *palaestrae*

Areas of the *palaestra* that could be decorated included flooring, walls, ceiling, and colonnades/porticoes. These features are all easily adorned because they are permanent architectural components of the *palaestra*, but freestanding artworks, such as sculpture and furniture, could also decorate this space. Was there a common decorative theme for *palaestrae*, or were *palaestrae* decorated arbitrarily? How were *palaestrae* decorated, and what types of artwork were displayed? Determining a decorative theme may help to illuminate the function of this space.[65] One must be cautious, however, as the displayed artwork could be relaying something besides the function of this space. Statues of an emperor and his family suggest nothing regarding physical exercise, nor that they were responsible for the construction of this area. The evidence for artworks in *palaestrae* is quite scarce. The reasons for this are many, including but not limited to: 1) marble being taken from the area to construct other buildings, 2) the artwork was moved to another area of the baths, 3) the artwork was stolen and removed from the site, 4) artworks, such as paintings, crumble and were destroyed, and 5) the *palaestra* was not fully excavated. Although some of the more thoroughly excavated *palaestrae* report finding coins, pottery, and other small items, these will not be regarded as artwork.[66]

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[65] P. Allison, *Pompeian Households: An Analysis of the Material Culture* (Los Angeles, 2004) and Z. Newby, "Sculptural Display in the so-called *palaestra* of Hadrian's villa" *RM* 109 (2002) pp.59-82.

[66] See R. Rebuffat, *Thamusida fouilles du Service des antiquites du Maroc, II, EFR Melanges d'archeologie et d'histoire, supplements, 2* (Rome, 1970) pp.63-64 for information on the findings at Thamusida, which include 33 coins and fragments of pottery. See Lenoir (1986) pp.102-109 for information on the findings at Volubilis including coins, pottery and bronze and iron implements. See E. Vallet, « Découverte d'un établissement Thermal à Fedj M'Zala » *RSC* 55 (1923-1924) p.207 for

Such objects likely belonged to citizens using the *palaestra* rather than as any form of decoration.

As it will be shown *palaestrae* were used for athletic exercise, and therefore one might expect that there might be images showing or alluding to this activity. Athletic images would be most suitable for decorating the *palaestra* and would constitute a theme for athletic activity. However, there are no images of athletes or athletic activity in any of the North African *palaestrae*.[67] There are, however, images of athletics located elsewhere in baths with *palaestrae*. In an unknown location of the Large East Baths at Mactaris, a low relief limestone slab measuring 1.53 m by 0.54 m and 0.5 m thick was uncovered. On it were six athletic figures separated into three different groups. In the Antonine Baths at Carthage there are three mosaics: one consisting of a few fragments showing athletes; another showing a couple of wrestlers within a dodecagon; and one showing athletes surrounded by horses. Lézine also mentions the discovery of the bust of a wrestler in the baths, but does not specify where. Finally Dunbabin mentions that there were three fragments of athletes, which included a boxer holding a palm leaf, as well as the head of another figure, found in the Large West Baths at Caesarea.[68] Although these athletic images are not displayed in *palaestrae*, Newby says that their presence in baths suggests interest in athletics and "the desire of bathers to see their own activities as a reflection of those of the stars of the sporting world."[69] Therefore after engaging in recreational exercise in the *palaestra*, citizens could walk through the rest of the baths and compare

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information on the findings at Hammam Des Beni Guecha including coins, pottery and fragments of a lamp.

[67] There are images of Hercules, who is associated to athletics, but he is regarded as a patron of athletes rather than as an actual athlete. See discussion below.

[68] See Appendix Three for more information on the artworks found in these baths.

[69] Z. Newby, *Athletics in the Ancient World* (London, 2006) p.74.

themselves to athletes. Despite the objections of ancient medical authors, such as Galen and Celsus, athletes also projected a good and healthy body image and the presence of athletic artwork confirms this.[70] This idea is strengthened by the fact that many athletic images are found in North African baths without *palaestrae*.[71]

Although there are no images of athletics in *palaestrae*, there are other images that suggest the theme of physical exercise and good health.[72] These are images of the naked male physique, which gave bathers a model to emulate while working out. One of these images is Hercules. He was connected to the *palaestra* because of his muscular body, and was a model for athletes, such as wrestlers and pancratiasts.[73] This connection to athletics is evident in the fact that one athletic club from the Roman period called itself 'the sacred roving athletic guild of those associated with Heracles'.[74] A fragment of a Hercules statue was found at Lepcis Magna, at the east end of the north walkway of the *palaestra*. Here there was a porch 6.3 m wide with a stone block 1 m high. Bartoccini suggests that a statue of Hercules was placed on top of the block because traces of sculpture and a fragmentary inscription ([*Deo He*]*rculi* / [*Sanc*]*to*) were found and he hypothesizes that the area was a cult for the worship of Hercules.[75] The Large Baths at Lambaesis and the baths at Mactaris, Hippo Regius, Carthage and Thysdrus also had sculptural images of Hercules, but unlike at Lepcis Magna, however, these images were not found in the *palaestra*.[76] The image of Hercules at Mactaris was part of an athletic relief, again showing a link between the two, but the provenance of this relief within the baths is unknown.[77] Therefore the presence of Herculean images suggests a decorative motif connected to athletic exercise.

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[70] Galen, *An exhortation to study the arts* 11.30, 11.31 and 12.32 and Celsus, *De Medicina* 1.3.

[71] See Appendix Five for a list of athletic mosaics found in North Africa, both in baths with and without a *palaestra*.

[72] G.G. Fagan, *Bathing in Public in the Roman World* (Ann Arbor, 1999) pp.88-90 discusses how baths have many visual associations that connect bathing with health.

[73] Newby (2006) p.74.

[74] The full title is in BM Papyrii, iii, no.1178 (Smallwood, Documents, no.374) from Newby (2006) p.35, n.77. See also H.W. Pleket, "Some aspects of the History of the Athletic Guilds" *ZPE* 10 (1973) p.208.

[75] R. Bartoccini, *Le Terme di Lepcis* (Bergamo, 1929) p.30. Bartoccini also suggests that the god Liber was worshipped here because another base was discovered in the vicinity alluding to this god.

Other than images of Hercules, very few naked male statues have been found in *palaestrae*. Bartoccini discovered part of a statue of a naked male in the Hadrianic Baths at Lepcis Magna, which he labeled a *palaestrita* (someone who attends the *palaestra*) but its provenance was not given.[78] It is unclear whether or not this was a statue of an athlete. However, if this statue was found in the *palaestra*, it could have provided another model of physical fitness for those exercising. If not placed here, its effect was likely the same, the promotion of an ideal and healthy body image.

Although there are a few pieces of artwork to suggest a decorative theme promoting physical exercise and a healthy body image, it does not appear to be a common or primary theme of North African *palaestrae*. Therefore what other decorative themes can be suggested for *palaestrae*? One is as a forum for civic activity or political self-promotion. Three unidentified magistrate statues were found in the two *exedrae* off the *palaestra* at Lepcis Magna; and in the *palaestra* at Thugga fragments of an unidentified municipal figure were uncovered.[79] Also in the *palaestra* at Thugga an inscription was placed on the architrave of the portico mentioning that these were the

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[76] The provenance of the Hercules sculpture at Hippo Regius is unknown, as well as the seven bases of seven Hercules statues in the Large Baths at Lambaesis. A head of Hercules was found on either side of the *frigidarium* at Thysdrus.

[77] See Appendix Three and G. Picard, « Un bas-relief agonistique à Mactar » *BCTH* n.s. 18b 1982 (1988) pp.95-99 for more on this relief.

[78] Bartoccini (1929) pp.142-146.

[79] For Lepcis Magna see Bartoccini (1929) pp.169-173 and for Thugga see L. Poinssot et R. Lantier, *BAC* (1925) p.XXXII.

Licinian Baths (*thermar*[*um Lic*]*inianarum*).[80] In the *palaestra* at Thuburbo Maius, there was an inscription on the portico stating that Petronius Felix and his sons dedicated this monument to members of the Severan family.[81] Various reasons exist to explain why these inscriptions and types of artworks were placed in the *palaestrae* at these sites. Probably these individuals were responsible for constructing, decorating, restoring, and/or providing amenities, such as oil to the baths.[82] Whatever the reason, these examples all show the effort made by the elite to get their names and images seen by the public and to show that they were devoted to the community.[83] The *palaestra* was a good forum for promoting oneself because it was a part of the baths, a structure frequently visited.

Another possible decorative theme for *palaestrae* is the promotion of specific religious cults or deities and the ideals they represented. Fagan notes that after Bacchus, representing pleasure and abandon, and Venus, representing sensual satisfaction, images pertaining to health, such as Asclepius and Hygieia, were the third most common found in baths.[84] The images of Hercules found in or near *palaestrae* were already mentioned as illustrating physical exercise and good health, but they also promoted the cult for the worship of Hercules. This suggests that *palaestrae* could promote other cults and deities. This is evident in the *palaestra* at Thuburbo Maius where there are the remains of a relief showing three dancing maenads, attendants of Bacchus. One of the capitals, also from here, was ornately decorated with grapes and pinecones, both of which are also associated with Bacchus.[85] It is a reasonable assumption to argue that the *palaestra* at Thuburbo Maius was in part devoted to the god Bacchus. *Palaestrae* could therefore have a religious decorative theme.[86]

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[80] *ILAfr*.573 gives the two fragments not found in the baths. *ILTun*.1500 gives all three fragments of the inscription. Also *AÉ*, 1925.31 and Poinssot et Lantier, *BAC* (1925) pp.XXXII-XXXIII.
[81] *ILAfr*.271.
[82] See Appendix One regarding the term *gymnasium* in North Africa possibly meaning gymnastic oil.
[83] J. Elsner, *Imperial Rome and Christian Triumph* (Oxford, 1998) p.95 and Fagan (1999) p.169.
[84] Fagan (1999) p.89 and p.89, n.19. Asclepius was a god of medicine and Hygieia was his daughter.

The artworks in *palaestrae* could also be indicative of cultural influences. One such form was the different column orders, such as the Corinthian order. Although the Corinthian order originated in Greece, it was used primarily by the Romans and found all over the Roman Empire. The Corinthian capital was often chosen because of its sculptural nature, and the more expense that was given towards decoration, the more glory was given to the deity and/or the donor of the building.[87] It was frequently used internally and the capital was typically decorated with an acanthus plant growing around a solid core (Figure 3.1).[88] The representation of the acanthus plant varied greatly on each capital, as the acanthus plant itself has many different species with different leaf forms.[89] This allowed local craftsmen to showcase their abilities, as they could take one acanthus design and sculpt it according to their vision. Therefore when the Corinthian style of capitals adorned the columns at Carthage, Lepcis Magna and Thuburbo Maius, their purpose was in part to display local decorative craftsmanship. The same can be said at Volubilis where Lenoir believes the capitals and most likely the columns were stuccoed.[90] If stuccoed, the capitals and columns may have been decorated by local artisans, rather than imported from abroad.

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[85] M.P.O. Morford, and R.J. Lenardon, *Classical Mythology*, 8th ed. (New York, 2007) p.311.

[86] Unidentified sculptures in *palaestrae*, such as those found in the Large Baths at Lambaesis, Volubilis, the three unidentified female statues at Lepcis Magna and the base of a pedestal found at Cuicul may also represent deities, however it is possible that these were also municipal figures, athletes or some other figure. See Appendix Three for more information on these statues.

[87] R. Adam, *Classical Architecture,* (London, 1990) p.96.

[88] Variations could exist regarding this decoration. For example see the capitals found at Mactaris in G. Picard, « Les fouilles de Mactar (Tunisie) 1970-73 » *CRAI* (1974) p.21.

[89] Adam (1990) p.94.

Another form of artwork found commonly in *palaestrae* were the mosaics that paved the floors under the porticoes. The most common type of mosaic was the simple black and white with geometric designs. No figurative mosaics were found in any of the *palaestrae*. These black and white geometric mosaics appear at Carthage, Mactaris, Sufetula, Thugga and the Large East, Marché De Sertius and Filadelfis Baths at Thamugadi. Dunbabin notes, polychrome figurative mosaics were much more expensive and less durable in areas of high foot traffic.[91] It seems reasonable to hypothesize therefore that in an attempt to keep costs down, local or neighboring mosaicists laid out these simple black and white geometric mosaics.[92] Thus the *palaestra* acted as a forum for local artists to showcase their skills. The same can be said for frescoes and marble that adorned walls. Although no complete fresco has survived, fragments of paint found in the *palaestra* at Thamusida suggest that wall paintings might typically be found in these spaces. The same applies to the use of marble for decorating walls. The walls in the *palaestra* at Thuburbo Maius revealed fragments of marble veneer.[93]

Besides displaying artwork that showcased local craftsmanship, artworks were sometimes chosen to show the Hellenic tastes of the patron. The Ionic capitals at

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[90] É. Lenoir, « Thermes Romains de Maurétanie Tingitane » in *Les thermes romains. Actes de la table ronde de Rome, 11-12 nov. 1988*, collection de l'EFR, 142, (Rome, 1991) pp. 18-22.

[91] Dunbabin (1978) p.8.

[92] See Appendix Three for a description of these mosaics. This was not the only form of floor covering, as marble paved the walkways at Lepcis Magna and Thuburbo Maius, while concrete paved the entire surface of the *palaestra* at Hippo Regius and Thugga. However, no mention is made regarding what type of material covered these latter two.

[93] Artwork also adorned the portico architraves, such as at Mactaris and Thuburbo Maius. The architrave at Thuburbo Maius was already discussed, as it had the three dancing maenads. At Volubilis the cornice had dentils and the lintels carried a low-level geometric relief. It is not clear what overall decorative theme these designs belonged.

Caesarea projected this, as the Romans favored them much less. The Ionic order was developed in Greece, and thus its appearance in a *palaestra* reminded viewers of its Greek origins.[94] The choice to use images of athletes also conveyed a more Hellenic appearance. Hugoniot argues that the elite would use images of athletics in order to be considered more Hellenic within the community.[95] Therefore, whether real or desired, the *palaestra* was a good location for showing the public one's heritage.

Conclusion

It appears that the largest North African *palaestrae* were located along the coast primarily due to the large populations. Regardless of location, however, all North African *palaestrae* share many common features. First they were typically connected to the exterior of baths and had entrances leading from the street. They also all possessed an inner court that was open to the sky and normally covered with sand or earth. Surrounding the inner court were columns and a covered walkway. The walkway was paved and benches could line the back walls. They also often possessed or were very close to cold pools. Although these features are common in North Africa, they are also found in most *palaestrae* throughout the Roman world.

Many North African *palaestrae* also share some features which are characteristic only of this region. The first is that the *palaestra* is normally situated in the north, east or northeast section of the baths. This arrangement meant the *palaestra* received the morning sun directly but was partially shaded when it moved westward and was at its hottest. Efforts to keep this area cool extended to its position in relation to the heated rooms of the baths, which was also a feature common mostly in North Africa. The second is that the majority of *palaestrae* were separated from the heated section either by the cold rooms but also by any space that decreased the transfer of heat from this area. Thirdly, North Africa was also the only region to construct circular *palaestrae*, reflecting the introduction of baroque architecture into this part of the Roman world. Although the square and rectangular *palaestrae* are found throughout the Roman world, in North Africa there is a correlation between these shapes and the dates of their construction. Finally the region also influenced the type of building technique, which was *opus africanum*, as well as the building materials used in their construction.

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[94] Adam (1990) pp.82-89.
[95] Hugoniot (2003) p.693.

Although they share many common characteristics, North African *palaestrae* were visually different from one another. Some of the disparities among them included size, shape, building materials and construction method. One of the biggest variations was the presence, or lack thereof, of adjoining rooms. The most common adjoining room was the latrine, but there were many other types as well, including semi-circular *exedrae* and other square or rectangular rooms. Although the functions of these rooms have not been determined, they appear to have been associated with the *palaestrae*, as they did not possess amenities for bathing. Finally each *palaestra* had a different decorative subject matter, which could have a cultural, religious, civic or social theme. These are the different ways in which North African *palaestrae* were distinct from one another, thereby making each one unique.

Thus, it can be concluded that North African *palaestrae* were not based on a single prototype from Italy or Greece, but rather they used some of the more typical features and adjusted them in order to better suit the climate of the region. The interior of *palaestrae* was kept relatively the same with the inner court and colonnaded walkway but efforts were made to keep these areas much cooler than elsewhere in the Roman world. As a result, North African *palaestrae*, although similar to one another, maintained their individuality by altering a few elements. One might say therefore that the form of *palaestrae* was adjusted in order to benefit those using them. Thus the function was instrumental in the layout of these spaces. In proceeding it is necessary to ask what function or functions did *palaestrae* provide for bathers, and what evidence is there to show this?

Chapter 4: *Palaestrae* in North Africa: Function and Use

Having determined the characteristic forms and features of North African *palaestrae*, it is now necessary to establish the function of these buildings. Although it is reasonable to believe that exercise could occur practically anywhere in a community, such as open spaces and homes, one of the primary purposes of *palaestrae* was to provide space for exercise.[1] The different types of exercises practiced included stretching, weight lifting, running, boxing, playing ball, wrestling and walking. Inscriptions and ancient writers, such as Seneca, Dio, Martial, Juvenal, Galen, and the *Historia Augusta*, all mention people engaging in these exercises within baths.[2] Other evidence, such as mosaics, strengthens the belief that baths and *palaestrae* were important facilities for exercises.[3] The aim here is to look at the evidence from North Africa to see what kinds of exercises occurred in *palaestrae* there. The evidence will show that recreational and athletic exercise was commonly practiced in *palaestrae*, and suggests that on some occasions athletic competitions could also occur. Just as many structures today hold more than one type of activity, *palaestrae* could also serve more than one function, including serving as a place for discussion and health treatment.[4]

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[1] Horace, *Carmina* 1.8, and Ovid, *Tristia* 3.12.9, & 4.6.31, all mention youths exercising in the Campus Martius, which was an open space at this time (1st century BC). Z. Newby, *Greek Athletics in the Roman Empire: Virtue and Glory* (Oxford, 2005) p.43 suggests that athletics could be practiced in homes. See also K.L. Gleason, "Porticus Pompeiana: a new perspective on the first public park of Ancient Rome" *Journal of Garden History* 14 (1994) pp.13-27 for a discussion on the Campus Martius. H. Dodge, "Amusing the Masses: Buildings for Entertainment and Leisure in the Roman World" in Potter (ed), *Life, Death, and Entertainment in the Roman Empire*, (Ann Arbor, 1999) p.248, C. Landes, "Les spectacles dans le monde romain, IV: le stade romain et ses spectacles" in Landes (ed) *Le stade romain et ses spectacles* (Lattes, 1994) p.12 and Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.69, all view the *palaestra* as a structure used for exercise.

[2] *CIL*, 6.9797, Seneca the Younger, *Epistles* 56, Dio Chrys., *Oration* 28.1-3, Martial, *Epigrams* 4.8, 7.35 and 7.67, Juvenal, *Satires* 6.419, Galen, *De Sand. Tuend.*6.324-5, and SHA, *Alexander Severus* 30.4.

[3] See Z. Newby, Z., *Athletics in the Ancient World* (London, 2006), Newby (2005) and S. G. Miller, *Ancient Greek Athletes* (New Haven, 2004) for examples discussing athletics and *palaestrae*.

Activities in the *palaestra*

a) Recreational exercises: walking, jogging, stretching, weight lifting, etc.

There are many different recreational exercises an ordinary bather could partake within a *palaestra*. Stretching and lifting some form of weights are just two possibilities. Seneca complains about bathers at Rome who lifted weights and grunted while working hard, or at least pretending to be working hard.[5] Although there is no evidence to show that stretching or weight lifting took place in North African *palaestrae*, it is not hard to believe that this happened. Building muscle by lifting heavy objects, such as rocks, pieces of marble, or any other heavy item, was an easy form of exercise. Any of these items could be used as a weight and their appearance in the archaeological record could as easily be disregarded or misidentified.

Other forms of exercise included walking and jogging. The paved walkways around North African *palaestrae* were suitable areas for these exercises. In those *palaestrae* fully excavated all had some form of paved flooring surrounding the inner court. Carthage, Mactaris, Sufetula, Thugga and the Large East, Marché De Sertius and Filadelfis Baths at Thamugadi all had mosaics paving this area; whereas at Thuburbo Maius and Lepcis Magna, marble paved the walkway, and at Hippo Regius there was concrete. All were appropriate surfaces for walking and jogging. The inner court of the *palaestra* could also be used for these activities and at Lepcis Magna there is a good example of this. Here the inner court had marble paths crossing through it, providing bathers another walking path besides the one surrounding this area. Of course earth was also an appropriate surface for walking and jogging and therefore, if large enough, many of the inner courts with earth and sand for floors, such as at Gigthis and Volubilis, were also suitable.

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[4] Hockey arenas are built for hockey games, but many other events, such as the circus or basketball games, can still occur inside. Many other physical and non-physical exercises likely took place in the *palaestra* as well, but only those verified by evidence will be discussed.

[5] Seneca the Younger, *Epistles* 56.1-2: *cum fortiores exercentur et manus plumbo graves iactant, cum aut laborant aut laborantem imitantur*. Martial, *Epigrams* 7.82, tells of a man who loses the sheath covering his penis while exercising in the *palaestra*. Although Martial jokes about the incident, his statement confirms that recreational exercise occurs within the *palaestra*.

This shows the different types of recreational exercise that could take place, but did the form of North African *palaestrae* allow for this to occur? The larger *palaestrae* such as those at Lepcis Magna, Gigthis, Caesarea and Carthage, were obviously quite adequate, but there is evidence to show that the smaller ones were just as accommodating. An inscription from the town of Sabratha states that in AD 378, Falvius Vivius Benedictus after the ruin of the baths, restored exercise to the people (*post ruinam et abnegatum thermarum populo exercitium … revocavit*).[6] Fagan speculates the baths referred to are those identified as the Baths of Region VII.[7] This bath has a small room in the southwest corner measuring approximately 10 m by 10 m, but it was not a *palaestra*.[8] If Fagan is correct and the inscription refers to this bath, then exercise took place in a relatively small area, as the room covered only 100 m². This size coincides with many of the smaller *palaestra* in North Africa, such as at Volubilis, Thamusida, Thugga, and the

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[6] *IRT*.103a. This inscription was found in the pavement of a 6th century AD basilica.

[7] G.G. Fagan, *Bathing in Public in the Roman World* (Ann Arbor, 1999) p.243, notes for #35. See L. Brecciaroli, "Le Terme della "Regio 7" a Sabratha" *LibAnt* 11-12 (1974-1975) pp.113-146 for a discussion on these baths.

[8] Although it does have four columns, this room is not classified as a *palaestra* because it does not satisfy the other criteria set out in this study. This does not signify however that the space was never used for exercise, only that it does not fit into the category of what a *palaestra* was in North Africa. I. Nielsen, *Thermae et Balnae. The Architecture and Cultural History of Roman PublicBaths*, vol.2 (Aarhus, 1990) p.28, C.217 classifies this bath as without a *palaestra*. F. Yegül, *Baths and Bathing in Classical Antiquity* (New York, 1992) p.238 believes that it is a tetrastyle hall that may have acted as a *palaestra*.

Large South Baths at Thamugadi, which covered approximately 90 m² at Thamusida to 221 m² at Thugga. It confirms that a small space was more than adequate for a few exercises, such as stretching and weight lifting.

Besides size, the design of *palaestrae* was advantageous for exercise. The design of North African *palaestrae* was similar to that of all *palaestrae* in the Roman world. Open to the sky, *palaestrae* allowed noise, created from the grunting and groaning of exercisers, to escape. If *palaestrae* were closed, this noise would filter into the other bathing rooms and disturb those wishing only to wash and relax.[9] Being open also meant that the *palaestra* was a cooler area for exercising. A breeze could circulate throughout the area making it a more comfortable exercising environment, especially in the North African climate. Shade was also offered under the colonnaded walkways around the exterior of the *palaestra* providing another respite from the heat of the sun.[10]

Due to the hot climate of the region, the design of North African *palaestrae* was different from other *palaestrae* in the Roman world. There were two design features implemented to increase the comfort of those exercising. The first feature involved the location of *palaestrae* within baths. Being open to the sky meant that the hot sun would beat directly down on those using this area. As previously demonstrated, the architects of *palaestrae* in North Africa took this into account by building *palaestrae* in the north or east of the bath complex. Placing them in this location meant they were furthest away from the sun when physical exercise occurred around 2 pm.[11] This innovative design feature was implemented in order to further shade exercisers from the intense mid-day sun courtesy of the west or southern bath block.

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[9] Seneca the Younger (*Epistles* 56.1-3) lived above a bath and was disturbed by the grunts and groans of those exercising within. The amount of noise created by all those exercising would have been great and worse if the area was closed off because the noise could only filter throughout the baths, rather than escape outside.

[10] The walkways also provided shelter from bad weather, such as rain. This was another common feature of *palaestrae*.

Another feature common among North African *palaestrae* was their position in baths in relation to the other bathing rooms. The *palaestra* was located closer to the cold baths and purposefully separated from the heated rooms. Although not limited to North Africa, this design was much more important for this region because of the climate, and therefore most baths implement it. After exercising, one might want to wash in the baths, both for hygienic reasons, as well as to relax. This could be accomplished in any of the bathing rooms, either the hot, warm, or cold rooms. However a hot, sweaty exerciser would not wish to cool down in one of the hot pools. Even the emperor Alexander Severus preferred to jump into a cold pool or to use the cold bathing rooms to relax and cool down.

> *Post lectionem operam palaestrae aut sphaeristerio aut cursui aut luctaminibus mollioribus dabat, atque inde unctus lavabatur, ita ut caldaria vel numquam vel raro, piscina semper uteretur in eaque una hora prope maneret.*[12]
>
> After his (Severus) reading he would devote himself to the *palaestra*, to ball-playing or to running or to some mild wrestling. Then, after having himself rubbed with oil, he would bathe, but rarely, if ever, in a hot bath, for he always used a swimming-pool, remaining in it about an hour.[13]

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[11] Martial, *Epigrams* 4.8. From the 24 *palaestrae* used in this study 14 were situated in the east of the baths while 5 were situated in the north. The 6 remaining *palaestrae* were placed elsewhere, with one *palaestra* located in between two baths and close to the south end, three located in the south and two in the west end of the baths.

[12] SHA, *Alexander Severus* 30.4.

[13] Translation by D. Magie, in *SHA*, Loeb, vol.II (1924).

Therefore most North African *palaestrae* adjoined or were very close to the cold bathing rooms and/or a cold pool.[14] Some, such as the Filadelfis Baths and Marché De Sertius Baths at Thamugadi, as well as the North Baths at Volubilis, had a cold pool situated within the *palaestra*. The proximity of cold rooms and pools to the *palaestra* is obvious. Immediate access to the cold bathing area was preferable to strolling through the heated area when already hot and sweaty. This was another design innovation influenced by the North African climate. This demonstrates that form followed function regarding these two design innovations.

b) Athletic activity

The *palaestra* was beneficial not only for recreational exercises, but also for more focused exercises such as athletics, which included wrestling, boxing and the pancration. Scholars, such as Newby, Nielsen, Pleket, Thébert and Yegül, have argued that baths were indeed viable locations for this type of activity.[15] Newby points to the presence of athletic mosaics found in Italian baths, arguing that simple contests may have been held in the baths.[16] Other evidence to support the idea of athletics occurring inside baths is the fact that athletic guilds (clubs) were often located near baths. Two inscriptions, one from the reign of Hadrian (AD 117 – 138) and the other from the reign of Antoninus Pius (AD 138 – 161), record grants of land near the Baths of Trajan at Rome, for the headquarters of an athletic guild.[17] That athletic clubs were situated in or near baths implies not only that athletes must have used them for bathing, but also for exercise and sparring. Athletic activity occurring in baths is supported by evidence from Italy, but is there similar evidence from North Africa *palaestrae*? In order to determine this, the evidence for athletic activity in North African *palaestrae* needs to be examined in two separate sections, as there is support for both athletic exercise and competition.

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[14] Some were separated from the cold pool by a few rooms, such as at Carthage and Gigthis, while others, such as at Lepcis and Sufetula, were connected by a door.

[15] Newby (2006) pp.58 & 139, Nielsen (1990), H.W. Pleket, "The infrastructure of sport in the Cities of the Greek World" *ScAnt* 10 (2000) p.635, Thébert (2003) p.456 and Yegül (1992) p.64.

[16] Newby (2006) p.58. She also notes that athletic mosaics could have evoked the public festivals that were held in Ostia or Rome.

[17] *IG* xiv.1054 = *IGUR* 235, and *IG* xiv.1055 = *IGUR* 236.

i) Athletic exercise and training

There are no literary sources from North Africa specifically stating that athletic exercise undertaken by professionals occurred in *palaestrae*.[18] Instead only inferences from ancient writers can be made. One such passage comes from the *Apologia* of Apuleius:

> *Vt uideo, uos palaestritam, non magum accusatum uenistis: ita omnis qui me accessere dicitis cecidisse.*[19]
>
> It appears to me that you are accusing a wrestler not a magician, since you say that all who visited me had a fall.[20]

Apuleius's use of the term *palaestrita* refers to a wrestler who exercised in the *palaestra*, and as the *palaestra* was located inside a bath, the connection between this structure and athletic exercise is easily made.[21]

Another passage is found in Tertullian's *De Pallio*.

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[18] It must be noted that ordinary bathers could undertake athletic exercise as well. For athletic exercise occurring in the *palaestra* outside of North Africa see Galen, *De Sanitate Tuenda*.6.324-5, CMG 5.4.2: from M.W. Dickie, "Παλαιστριτης/Palaestrita: Callisthenics in the Greek and Roman Gymnasium" *Nikephoros* 6 (1993) p.118. Lucian, *Anach*.24 & 27 describes the different athletic exercises that were done in the gymnasium. Assuredly these same exercises could occur in the *palaestra* as well. There are also those writers that refer to wrestlers as *palaestritae*; those who exercised in the *palaestra*. See for example Martial, *Epigrams* 3.58, 14.201 and Ammianus, 15.3.4.

[19] Apuleius, *Apologia* 48.2.

[20] Translation by H.E. Butler, *The Apologia and Florida of Apuleius of Madaura* (Oxford, 1909) p.85.

[21] See also Apuleius, *Apologia* 63.7, and Apuleius, *Metamorphoses* 1.15 for other uses of the term *palaestra*.

> *Aut, ni ita est, unde gentium in prouinciis melius exercitis, quas natura agro potius eluctando commodauit, studia palaestrae male senescentia et cassum laborantia, et lutea unctio et puluerea uolutatio, arida saginatio?*[22]
>
> Or if this is not the case, from where else in the world is it that in provinces that are better trained, adapted by nature rather for conquering the soil, there are exercises of the wrestling-school (thereby lasting into a bad old age and labouring in vain), and unction with mud, and wallowing in the dust, and living on a dry diet?[23]

Athletes commonly competed and trained in mud and dust.[24] Therefore although *studia palaestrae* is more accurately translated as the 'enthusiasm of the *palaestrae*', the context of the passage suggests that Tertullian is referring to athletic exercises.

One may also point to another passage by Tertullian; this time coming from the *Apologia*.

> *Nihil est nobis dictu visu auditu cum insania circi, cum impudicitia theatri, cum atrocitate arenae, cum xysti vanitate.*[25]
>
> Neither in our speech, sight, nor hearing, have we anything in common with the madness of the circus, the immodesty of the theatre, the atrocity of the arena, or the vain-glory of the *xystus*.[26]

The passage mentions all four major forms of entertainment, as well as the facilities where they occurred. When mentioning athletics Tertullian says that they take place in the *xystus*, which is defined as an open colonnade or walkway. Based on this description, it is very possible that the word *xystus* was used as an alternative term to identify a *palaestra* in North Africa.[27] Therefore his remark about athletic activity occurring in an open colonnaded area further strengthens the connection between the *palaestra* and athletic exercise.[28]

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[22] Tertullian, *De Pallio* 4.1.2.

[23] Translated by V. Hunink, in Tertullian: *De Pallio* (Amsterdam, 2005).

[24] See below for the discussion on flooring, which includes mention of the use of dust and mud by athletes.

[25] Tertullian, *Apologia* 38.4.

[26] Translated by T.H. Bindley, *The Apology of Tertullian* (Oxford, 1890).

[27] The term was also used by Cicero to describe the location where athletes exercised. See Appendix Two for the discussion of the word *xystus* used to describe the *palaestra* in North Africa.

One question that arises from Tertullian's statement is whether the athletic activity that he mentions refers to exercise or competition. Based on the use of the word *vanitate*, it would seem more likely that he refers to athletic exercise. One of the main criticisms about athletics concerned the athletic physique, and Toner notes that athletes were often described as being fat, dirty, sweaty, oily, stupid and effeminate.[29] Although Roman writers, such as Cicero, recognized the devotion athletes had towards training, they were very critical of the lifestyle and character of athletes.[30] Plutarch felt athletes wasted their time exercising too much, while Celsus and Galen believed that athletes did harm to their bodies by exercising excessively.[31] Ancient writers believed that athletes exercised not to maintain a healthy lifestyle, but because they were vain and wanted bodies perfected for competition. Therefore when Tertullian refers to the vanity of the *xystus*, he refers to the perfected bodies obtained by constant exercise in this area.[32]

There is also physical evidence suggesting that athletic exercise occurred in North African *palaestrae* as well. The form and location of *palaestrae* inside baths, as mentioned above for recreational exercise, was also very beneficial for athletic exercises. The large size of *palaestrae*, such as those at Lepcis Magna, Gigthis, Carthage, Caesarea, Thysdrus, and the Large Baths at Lambaesis, were more than accommodating for all types of athletic exercise.[33] In fact Fraser and Van Buren believe that the holes found in the pavement of the walkway around the inner court at Lepcis Magna were used for setting up athletic equipment.[34] Smaller *palaestrae* were also suitably sized to allow for some athletic exercises. Those measuring less than 1000 m^2 would not be able to accommodate such athletic exercises as running, jumping, javelin, and the discus because there was just not enough space, but boxing, wrestling and the pancration could easily take place.

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[28] C. Hugoniot, *Les Spectacles de l'Afrique Romaine: une culture officielle municipale sous l'Empire romain* (Paris, 2003) pp.805-809, refers to this passage but argues that, although the vanity refers to athletics, Tertullian is implying that the athletic competition takes place in the stadium.

[29] J.P. Toner, *Leisure and Ancient Rome* (Great Britain, 1995) p.51.

[30] Praising athletes: Circero, *Tusc*.2.36, 2.56 and 2.62. Criticizing athletes: Cicero, *Tusc*.2.40.

[31] Plutarch, *Mor*.247D-E, Celcus, *De Medicina* 1.3, and Galen, *An exhortation to study the arts* 11.30, 11.31, and 12.32.

[32] See below for another possible interpretation of this passage from Tertullian.

One question regarding the suitability of *palaestrae* for athletic exercise concerns the flooring. Lucian mentions that athletes wrestled in either mud or sand, as they were much softer and safer for rolling around, while Plutarch mentions that mud, dust, and keroma (a mixture of mud and oil) were also good surfaces for athletic exercise.[35] If North African *palaestrae* were used for athletic exercises, the archaeological evidence would corroborate this. As it happens the majority of *palaestrae* did indeed have inner courts consisting of earth or, in the case at Gigthis, sand. Even at Lepcis Magna, where there were paved paths running through the inner court, there was still adequate earthen flooring to allow space for exercise. Therefore inner courts were quite adequate for athletic exercises such as wrestling, boxing and the pancration. Earth and sand were not, however, the only floor coverings found in North African *palaestrae*. Some, such as those at Thugga, Hippo Regius, Cuicul, Mactaris, and Carthage, were paved in either limestone, mosaic or concrete.[36] Although this would seem to indicate that athletic exercise did not take place within the inner courts of these six *palaestrae*, a passage from Vitruvius suggests otherwise. Vitruvius mentions that in the winter, athletes would use the paved covered walkways to practice their exercises.[37] Thus it is possible that, although much firmer, paved inner courts still functioned the same as those that were not paved.

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[33] Although the discus and javelin could have occurred in some of these *palaestrae*, it is unclear on how safe this would have been for the other bathers.

[34] G. Fraser and A.W. Van Buren, "Roman Bath at Lepcis" *MAAR* 10 (1932) p.130. However there is nothing to substantiate this belief.

[35] Lucian, *Anacharsis* 28-29 and Plutarch, *Quaest. Conv*.2.4. Ovid, *Tristia* 4.6.31 also mentions a wrestler on sand. See also M.B. Poliakoff, "*πήλωμα* and *κήρωμα*: Refinement of the Greco-Roman Gymnasium" and "σκάμματος καὶ πηλώματος : ЄIG II 2758" *ZPE* 79 (1989) pp.289-292 for a discussion on Plutarch.

Other evidence showing that athletic exercise occurred within baths comes from artwork. Of the eleven mosaics showing athletes or athletic activity coming from North Africa, ten come from inside baths.[38] They range in dates from the 2nd to 7th centuries AD and most depict boxers or wrestlers. None of these mosaics however were found in a *palaestra*. Sculpture showing or alluding to athletics is also commonly found in baths. Newby argues that, early on, athletic sculpture likely promoted Greek culture but around the mid 2nd century AD it was also used to promote athletics.[39] In the *caldarium* (hot room) of the Antonine Baths at Carthage, the bust of an athlete was found.[40] A low relief limestone slab from the Large East Baths at Mactaris depicts two pairs of wrestlers and a third pair suspected to be Hercules and an athlete. Hercules was already mentioned as being a patron of athletes and as his sculptural images are found in many baths, such as the Large Baths at Lambaesis and the baths at Mactaris, Hippo Regius, Carthage, Lepcis Magna and Thysdrus. These offer more support that athletic exercise occurred inside baths.[41] Like mosaics, the presence of athletic sculptural images strengthens the link between athletic exercise and baths and ~~al~~though most of these artworks were not found in a *palaestra*, it was the most suitable area for accommodating this.

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[36] See discussion in Chapter Three.

[37] Vitruvius, *De Architectura* 5.11.4.

[38] The eleventh mosaic showed two pairs of wrestlers with a table of prizes between them and was found in the threshold of a house in the city of Utica, Tunisia. There are other mosaics from North Africa believed to be related to athletics but do not show athletes. This includes mosaics showing only athletic prizes like crowns, purses of money and palm leaves. Examples of this are found at Althiburos, Neapolis, Kelibia, and Bou Arkoub in Tunisia and Cirta in Algeria. See Hugoniot (2003) pp.676-681 for a discussion on mosaics showing athletic crowns in North Africa.

[39] Newby (2005) pp.91-95. See also J. König, *Greek athletics in Roman literature* (Cambridge, 2005) pp.107-126. Athletic sculpture also promoted health and beauty. E. Bartman, "Sculptural Collecting and Display in the Private Realm" in E.K. Gadza (ed), *Roman Art in the Private Sphere* (Ann Arbor, 1991) pp.74-77 notes that there are many questions to be asked when determining why statues were located where they were. Subject, artistic manner and even a simple fondness for a statue can all play into the selection. The selection of athletic sculpture was likely influenced by all these criteria but the fact that athletic activity occurred inside the *palaestra* also influenced the selection of these pieces.

[40] See the relevant artwork sections of Appendix Three for a more detailed description of these sculptural images, as well as accompanying bibliography.

The evidence shows that North African *palaestrae* were suitable locations for providing exercise for both ordinary citizens as well as athletes. If frequented by athletes it would not be surprising to believe that athletic trainers also frequented *palaestrae*, training their students or hoping to spot youths with potential.[42] As a location for athletic exercise, it is likely that certain baths even became hangouts or headquarters for athletes, as the Baths of Trajan did at Rome.[43] Broise and Thébert, in their study of the Memmian Baths at Bulla Regia, hypothesized that some of the decorations inside the baths were actually club insignia.[44] Whether this indicates that the Memmian Baths acted as a clubhouse for athletes, or some other group, is impossible to say. It is a strong possibility that North African athletes frequented baths with *palaestrae* more than baths without this facility because they were good places for athletic exercise.

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[41] Although sculptural images of Hercules were often found in baths, only the *palaestra* at Lepcis Magna possessed a fragment of a Herculean statue.

[42] Pliny the Younger, *Panegyricus* 13.5 mentions that Greek trainers would help Roman exercisers: *postquam exercitationibus nostris non veteranorum aliquis, cui decus muralis aut civica, sed Graeculus magister assistit*. Petronius, *Satyricon* 30 also mentions the presence of runners exercising under a trainer: *Notavi etiam in porticu gregem cursorum cum magistro se exercentem*.

[43] *IG* xiv.1054 = *IGUR* 235, and *IG* xiv.1055 = *IGUR* 236. There is no evidence to suggest that any bath in North Africa became the headquarters of an athletic guild, but the possibility does exist. Yegül (1992) p.237 feels that some smaller baths may have been used as entertainment centres.

[44] H. Broise & Y. Thébert, *Recherces archéologiques Franco-Tunisiennes à Bulla Regia : II. Les Architectures, 1. Les Thermes Memmiens*, vol.2, pt.1 (Rome, 1993) pp.415-419. Hugoniot (2003) p.406 argues that in a mosaic from Theveste, there is an athlete surrounded by animals, as well as the club emblem of the Telegenii, suggesting that athletes belonged to this club. See Appendix Three, and the Memmian Baths of Bulla Regia, for a more complete bibliography regarding club insignia in North Africa.

ii) Athletic Competition

Clearly athletic exercise took place in North African *palaestrae*, but did athletic competition occur here as well? As we have already seen many athletic festivals took place in North Africa. The major athletic festivals, such as the Pythian and Asklepian games at Carthage and the Antonine and Severan games at Caesarea, were surely held in a stadium.[45] When Tertullian talks about the Pythian games at Carthage he implies that they took place in the stadium; in his treatise on spectacles, athletics were always associated with the stadium.[46] The mosaic from Baten Ezzamour, Tunisia, illustrates what appears to be an athletic festival; it includes the pentathlon, boxing, wrestling, prizes, judges and athletic attendants. It is likely a representation of an athletic festival that occurred in a large city, perhaps Carthage. This image does not give any indication of what type of structure held these competitions, but large festivals required a structure, such as a stadium, capable of accommodating the competitors and possibly thousands of spectators and most *palaestrae* were not equipped for this.[47] The evidence from North Africa does suggest however that *palaestrae* were much more suitable for smaller contests and a handful of spectators.

The evidence demonstrating that recreational and athletic exercise could occur in North African *palaestrae* can also be used to show that athletic competitions could occur there as well. If athletes could train and practice in these buildings, then there is nothing preventing the performance of actual competitions, either as a part of friendly contests or as a part of organized ones. The different forms of artwork, such as athletic mosaics and sculptural relief, could also suggest that the baths were locations for athletic competitions. There is some other evidence however demonstrating the likelihood of *palaestrae* and baths being used for athletic competitions.

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[45] See Chapter One for the discussion on athletics and these four festivals in North Africa.
[46] Tertullian, *Scorpiace* 2-4 and Tertullian, *De Spectaculis* 11.3, 18.1, 20.5 & 30.7. See Chapter One for the discussion on the presence of a stadium at Carthage.
[47] The mosaic from Baten Ezzamour was found in a bath, but there was no *palaestra* attached to it. Its presence does however strengthen the connection between baths and athletics. For a detailed description of this mosaic see M. Khanoussi, « *Speculum pugilum et gymnasium*, compte rendue d'un spectacle de jeux athlétiques et de pugilat figure sur une mosaïque de la région de Gafsa » *CRAI* (1988) pp.543-561.

Though limited, there is literary evidence which demonstrates that athletic competition could take place within *palaestrae*. One example comes from the Tertullian passage from the *Apologia*, mentioned above.[48] It was already argued that the vanity of the *xystus* possibly referred to athletic exercises because athletes were known for being vain regarding their appearance. However if taken within the context of the whole sentence, the same passage could refer to athletic competition occurring within the *palaestra*.[49] The madness of the circus could refer to the excitement of actual races, the obsceneness of the stage could refer to plays that were being shown, and the cruelty of the amphitheatre could refer to the blood spilled between gladiators. Tertullian may therefore be referring to the hysteria created by the live performances of these three spectacles. So when mentioning the vanity of the *xystus*, he could be referring to an actual athletic competition taking place in the *palaestra*. His comment then could be taken as referring to contests. Other than Tertullian there are no other North African writers who suggest the *palaestra* or baths ever held athletic competition.

There is however, an inscription from Theveste, Algeria, that alludes to the possibility of athletic competition occurring in the *palaestra*. It was found on the inside of a triumphal arch dated to AD 214.[50] The inscription states that C. Cornelius Ergilianius gave *gymnasia* to the public and these took place in the baths ([*gy*]*mnasia populo publice in thermis*).[51] No *palaestra* has been found at Theveste, but further excavation may uncover one. Besides the lack of *palaestra*, two problems clearly exist regarding this inscription. The first is that the inscription fails to mention where in the baths these *gymnasia* occur, but the *palaestra* was the most practical area. It was the only area capable of holding both athletes and spectators. A pair of boxers could fight in any small room, but as these contests were for the public (*populo publice*), adequate space was required. The bigger *palaestrae* were spacious enough but it is unclear whether or not temporary seating was provided for spectators in the *palaestra*.[52] The colonnaded walkway around the *palaestra* did function as a divider between spectators and exercisers. In a few examples there is an obvious separation between the inner court and the walkway. The Hadrianic Baths at Lepcis and the *Palaestra* of the Petronii, connected to the Summer Baths at Thuburbo Maius, both had two steps separating the inner court of the *palaestra* from the walkway. Although not excessive, it was a higher elevation than the inner court and likely provided a better vantage for watching athletics. Martial mentions that people could easily see those exercising in the *palaestra*.[53] As the walkway was usually covered it also provided shade for the spectators as well. Although the majority of *palaestrae* did not have steps separating these two areas, the walkways were still the most obvious location for spectators to stand and watch.

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[48] Tertullian, *Apologia* 38.4.

[49] Hugoniot (2003) p.805, argues that the stadium was where this vanity occurs, even though Tertullian makes no mention of this structure here.

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[50] *CIL*.8.1858 = *ILAlg*.3040. This inscription was previously mentioned in chapter one in regard to the discussion of athletics and their occurrence in North Africa.

[51] L. Leschi, *Études d`épigraphie, d`archéologie et d`histoire africaines* (Paris, 1957) p.121 agrees with the view that the *gymnasium* mentioned likely refer to athletic competitions.

[52] Although *palaestrae* had benches underneath the walkways they were not likely used for watching exercise or competitions occurring in the inner court. See below for the discussion on the benches and what they might have been used for.

[53] Martial, *Epigrams* 7.82: *dum ludit media populo spectante palaestra.*

The second problem with this inscription is the meaning of the word *gymnasia*. I have discussed in Appendix One that the term *gymnasium* in North Africa does not refer to a structure. Therefore scholars have argued that the term refers sometimes to athletic competitions and sometimes to olive oil. Based on these two possibilities, it is not apparent which definition should be applied to this inscription, as athletic competitions and oil can both be easily used for the translation. However I argue that the term should be translated as gymnastic oil, with the understanding that it was used for athletic exercises. Therefore translated as gymnastic oil, the meaning of this inscription becomes clearer. C. Cornelius Ergilianius gave to the public, gymnastic oils in the baths, with the underlying understanding that it was to be used for some type of athletic competition.

There are no other inscriptions that specifically place athletic competitions inside a bath or a *palaestra*. However there are a few other *gymnasium* inscriptions that raise this possibility. Another inscription from Theveste, found on two plaques inside a bath, mentions the gift of a *gymnasium*.[54] In the Large Baths at Lambaesis two identical inscriptions referring to a *gymnasium* were found on one of the *frigidarium* walls.[55] These latter baths had a sizeable *palaestra*, covering around 3000 m², capable of holding a relatively large number of competitors and spectators. Although they are no longer extant, their presence further suggests the possibility of an athletic competition occurring somewhere in the baths.[56]

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[54] *CIL*, 8.16530 = *ILAlg*.1.3032. It dates to AD 180-182.

[55] *AÉ*, 1914.19. It dates to the late 2nd to 3rd century AD. See Large Baths at Lambaesis in Appendix Three for a more detailed discussion of this bath and its *palaestra*.

[56] There are many other *gymnasium* inscriptions from North Africa, but these inscriptions do not state that the *gymnasium* was given in the baths. It can only be inferred that these other *gymnasia* were given in baths.

c) Recreational Competition

Other activities that took place inside baths and *palaestrae* were recreational games. Friendly sparring athletic competitions could occur between ordinary bathers, but there were different types of ball games and board games that could occur in the *palaestra* as well.[57] There is much evidence from outside of North Africa showing that different types of ball games were played in the baths. A funerary inscription from Rome mentions how a certain Ursus was very successful at playing ball in the baths.[58] Roman writers, such as Martial, Seneca, *Historia Augusta*, and Cicero, also all mention ball games played in either the baths or the *palaestra*.[59] This was a popular form of physical activity in Italian baths and it appears that anyone could participate.

Evidence, in the form of inscriptions, shows playing ball games in baths was also common in North Africa. Baths found at Cyrene and Aubuzza had rooms specifically constructed for playing ball games, which are identified as *sphaeristeris* and *paganicum* respectively.[60] Although these baths had a designated room for playing different types of ball games, most may not have had such rooms.[61] Depending upon the type of ball game, any room may have sufficed, provided there was space. However baths with a *palaestra* would have offered ample space for throwing, bouncing and rolling balls around.

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[57] Fagan (1999) p.29 believes some *palaestrae* could be used for playing ball games.

[58] *CIL*, 6.9797. For more on the ball game played by Ursus see E. Champlin, "The Glass Ball Game" *ZPE* 60 (1985) pp.159-163.

[59] Martial, *Epigrams* 7.32, Seneca the Younger, *Epistles* 56.1-2, SHA, *Alexander Severus* 30.4, and Cicero, *De Oratores* 1.73. Horace, *Sermones* 2.2.9-13 says the ball game is played alongside those practicing the discus and although he does not put this activity inside the *palaestra* he does place the training of athletes together with people playing ball games and this suggests *palaestrae*, or baths, as possible locations for these activities. Petronius, *Satyricon* 2.27 says that the ball game is played outside of the baths. Galen, *The Exercise with the Small Ball* also recommends playing ball over other physical exercises.

[60] *AÉ*, 1928.2 and *CIL*, 8.16368 respectively. See R. Rebuffat, « Vocabulaire Thermal : Documents sur le Bain Romain » in *Les thermes romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) pp.33-34 for a discussion on the word *paganicum*. Unlike the term *palaestra*, *sphaeristerium* was found elsewhere in the Roman world including Sicily: *AÉ*, 1946.239, and Germany: *CIL*, 10.7004 = *ILS*.5663.

[61] It is possible that *sphaeristeris* and *paganicum* were alternative words also used to label a *palaestra*, but there is no evidence to support this idea.

Games involving balls were not the only recreational competitions that occurred in *palaestrae*; there is also evidence for board games. In the *palaestra* of the Petronii the remains of a 36-hole game board are still visible on the floor.[62] Not all board games had to be carved into pavement to be played, as game pieces were likely brought to and from the *palaestra*. *Palaestrae* were also not the only locations where board games could be played, as the forum at Thamugadi, Algeria had one carved into its pavement, with the inscription "Hunting, bathing, gambling, laughing – that's living!" (*venari*, *lavari*, *ludere*, *ridere*: *occ* (= *hoc*) *est vivere*).[63] This inscription indicates that gambling was another popular activity and suggests that it could also occur within baths, as patrons could bet on the outcome of ball games and athletic competitions.

d) Intellectual activities

The evidence examined so far has indicated that one of the primary functions of *palaestrae* was for exercise, which included athletic and recreational activities. The *palaestra* was also used for activities that were not physical at all.[64] Although Vitruvius notes that the *palaestra* was used for physical exercise, he adds that it could also be used for study.[65] Cicero too mentions how *palaestrae* were used for reading and writing.[66] The evidence from North African suggests that *palaestrae* here were also used for such intellectual activities.

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[62] http://www.planetware.com/tunisia/thuburbo-majus-palaestra-of-the-petronii-tun-za-tmpp.htm.

[63] *CIL*, 8.17938 = *ILS*.8626f.

[64] A. Farrington, "The introduction and spread of Roman bathing in Greece" in Delaine, J., & Johnston, D.E., (eds) *Roman Baths and Bathing* (Portsmouth, 1999) p.65 suggests that some *palaestrae* were used for socializing, while Yegül (1992) p.397 believes the *palaestra* at Lepcis Magna acted more like a plaza. Varro, *RR*.3.13.1, describes how he used his *palaestra* as a place to feed boars. The boars were not located here but rather below it, presumably in a pen. N.B. Crowther, "The *Palaestra*, Gymnasium and Physical Exercise in Cicero" *Nikephoros* 15 (2002) p.164 argues that this was not the primary function of Varro's *palaestra*; it was just an ideal place from which to feed these animals.

The walkways around the exterior of the court have already been mentioned as areas used for walking, stretching and even as a platform for watching activities occurring in the inner court of the *palaestra*. However this area was also a good location for reading and discussing various topics.[67] Benches were found around the *palaestra* at the baths at Sufetula as well as at the Large East Baths at Thamugadi. Although the benches could work as seats for spectators, it was only possible if there was no one standing in front, blocking the view. More often the benches were used for rest and discussion. When physical exercise was not occurring within the *palaestra*, others used it for gathering and talking. Lucian, in a hypothetical discussion, has Anacharsis telling Solon that they should go and sit in the shade where there were benches in order to get away from the athletic activity.[68] Areas for more quiet reflection and study were added in the form of *exedrae*. At Gigthis, Lepcis Magna and Mactaris there were *exedrae* just off of the *palaestra*, and they provided a quieter area for discussion.[69]

Although it is impossible to determine all the different types of intellectual activity which occurred in *palaestrae*, politics was likely high on the list. *Palaestrae* were ideal areas for promoting someone's career. Members of the community inscribed their names on the porticoes, as Petronius Felix and his sons did in the *palaestra* at Thuburbo Maius.[70] Municipal figures also had sculptures of themselves erected. Examples of this can be seen in the *palaestra* at Lepcis Magna, and at Thugga. Three unidentified male statues of magistrates were found in the two *exedrae* at Lepcis Magna, while at Thugga one unidentified magistrate was found. This imagery would have provoked political discussion among patrons and whether positive or negative, political members of the community used the *palaestra* for just this purpose.

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[65] Vitruvius, *De Architectura* 5.11.

[66] Cicero: *De Oratores*.1.98; *De Legibus* 2.6; *Q.fr*.3.1.3; *Q.fr*.3.9.7. It is plausible that there were other unknown activities happening, such as playing music, but the lack of evidence does not allow one to make any conclusive statements.

[67] Yegül (1992) p.173.

[68] Lucian, *Anacharsis* 16. In this treatise the two men are watching athletic activity occurring in a gymnasium, but the description Lucian gives of the structure they are in resembles very closely to that of the *palaestra* in North Africa.

[69] The *exedrae* at Lepcis Magna even had benches. Nielsen (1990) believes that the *exedrae* could hold meetings.

e) Health Treatment

Another function of *palaestrae* was as places for relaxation and recovery. It was a place where a person could go and get pampered or looked at by a doctor. Many Roman writers used the word *palaestritae* to describe those who pampered others. Petronius, (1st century AD), Sidonius (5th century AD) and Persius (1st century AD) all tell of *palaestritae* who were responsible for oiling, massaging and providing other duties of a cosmetic nature.[71] That they use a cognate of the term *palaestra* suggests that the pampering occurred in this area.[72] This area was also a good location to be looked at by a doctor. Baths were locales for doctors searching for sick patients, as the sick frequented and were even encouraged to attend these facilities.[73] It is not surprising then that *palaestrae* had facilities to accommodate these types of services.

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[70] *ILAfr.*271.

[71] Petronius, *Satyricon* 21.4-5, Persius, 4.39, and Sidonius, *Ep.*2.2.6. See also Dickie (1993) esp. pp.132-146 for further discussion on the word *palaestritae*. Celsus, *De Medicina* 2.17.8 and Galen, *The Exercise with the Small Ball*, both also recommend massages in the bath.

[72] The word *palaestra* was also occasionally used as a term in comedy to refer to a brothel. Plautus, *Bacch.*1.1.34 and Terence, *Phorm.*3.1.20.

[73] Celsus, *De Medicina* 3.1-16, SHA, *Hadrian* 22.7, and Apuleius, *Metamorphoses* 1.23, 5,15 & 8.7. Inscription *AE*, 1929.7b = *IRT.*918 = *ML.*40 from Bu-Ngem, Tripolitania, mentions the connection between baths and health.

There is some evidence from North Africa to support this idea. Although the *exedrae* and other adjoining rooms just off of *palaestrae* could be used for intellectual pursuits, they could also have been used for medical checkups and massages.[74] Examples include the 3 m by 3 m rooms just off of the *palaestra* at the Hammam Des Beni Guecha, which were enclosed enough to suggest private areas where activities such as these could take place, and the 7.15 m by 9.25 m room identified as an oiling room (*elaeothesium*) at Cuicul.[75] As olive oil was commonly used in baths, one of its many uses was for massage.[76]Almost every *palaestra* in North Africa has some unidentified rooms around it, all of which could have provided these functions.

Conclusion

North African *palaestrae* accommodated many different types of recreational exercise including walking, playing ball, weight lifting and stretching. However, the chief function of these structures was as a forum for both athletic exercise and competition. Although the size of *palaestrae* determined the types of athletic exercises that could take place, there was enough suitable space for most of them. Besides the form, artworks and inscriptions further suggest the presence of athletic activity within baths and therefore *palaestrae*. However, the presence of benches and game boards indicates that other activities also occurred here. Benches acted as seats for spectators, areas for resting, and places for patrons to sit and discuss an assortment of topics, including politics. The various rooms around the *palaestra* were good locations for discussion, but they were also good locations for receiving massages ~~or treatments~~ from doctors. Thus the North African *palaestra* did allow patrons to engage in many other sorts of activity besides physical exercise.

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[74] Yegül (1992) p.355 also suggests the possibility that the rooms just off the *palaestra* could have been used as 'medical suites'.

[75] E. Vallet, « Découverte d'un établissement thermal à Fdj M'zala » *RSC* 55 (1923-1924) pp.204-205, A. Ballu, « Ruines de Djemila (antique Cuicul) » *RAfr* 62 (1921) p.259 and P. Romanelli, *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) p.181, respectively. There is no indication as to why this was identified as the oiling room.

[76] For oil used in baths see for example Apuleius, *Metamorphoses* 1.23 & 1.7, Cassius Dio, 37.51.4, 49.43.3, and 54.25.4, Pliny the Elder, *NH*.36.121, and Suetonius, *Nero* 12.3. See also *CIL*, 5.5279 = *ILS*.5728, *CIL*, 14.2112 = *ILS*.7212.II.29-31, and *CIL*, 11.6360. Fagan, (1999) p.90 identifies medical masseurs as *iatraliptae*.

It can be concluded that the functions of North African *palaestrae* were similar to those of *palaestrae* elsewhere in the Roman world. However, although able to provide such a variety of similar functions, the construction of North African *palaestrae* was to accommodate one function in particular. Primarily they were structures designated for physical exercise, and the evidence from North Africa substantiates this. The most compelling argument supporting this is that climate forced design alterations to the form of the North African *palaestra* that best suited this region. These alterations enabled exercise to continue, but in a much cooler environment. Although equally advantageous for those who used the *palaestra* for discussion, or massage, it was not necessary to implement any design alterations to accommodate these functions. The walkways provided the same amount of shade, no matter where the *palaestra* was located in the baths. Therefore it is clear that the function of physical exercise dictated the form of *palaestrae* in North Africa.

Conclusion

It is clear that the Vitruvian description of a *palaestra* does not completely conform to any known *palaestrae*. His model does closely resemble Hellenistic *palaestrae*, with their courtyards, many adjacent rooms, such as the *ephebeum* and cold-water room, and a stadium or *xystus*, but there is one major difference between the Hellenistic and Vitruvian *palaestra*. This was the inclusion of warm bathing rooms in the Vitruvian *palaestra*, which was clearly a Roman addition. The early Italic *palaestrae* also initially followed the design of Hellenistic *palaestrae*, but by the end of the 1st century BC they began to incorporate more and more warm bathing rooms at the expense of the *palaestra*, as well as they began to be pushed to the edge of the baths

At the beginning of the Roman Imperial period, this design for Roman *palaestrae* became the standard. The only changes that were implemented were those *palaestrae* constructed within the large Imperial baths at Rome during the 1st and 2nd centuries AD. These still possessed the same design characteristics as those before them, but now there appears to have been a conscious decision to make the shape of these *palaestrae* rectangular, a shape that would afterwards be copied in nearly all *palaestrae*, if space allowed. Another design change included the return of *palaestrae* back to the centre of the baths, harkening back to the Hellenistic and early Italic design. Although this occurred in the imperial baths, it was not a design feature that was followed in non-imperial bathing establishments, as these baths typically continued to have their *palaestrae* constructed around the edge. The *palaestrae* in imperial baths may have also lost their function as areas for recreational and athletic exercise. The imperial baths began to include large tracts of open space around their periphery, which could have more easily accommodated these exercises.

Regardless of the differences found in the *palaestrae* in imperial baths, by the 3rd century AD most Roman *palaestrae* shared many features. They were attached to baths, located around the exterior, possessed colonnades, had a courtyard that was open to the sky, and they opened into rooms that were not designated for bathing. If space was not a factor, most *palaestrae* were rectangular, following the shape instituted by those found in the imperial baths. These were the features then that also made up the form of North African *palaestrae*.

Although North African *palaestrae* possessed all of these features, circumstances forced significant alterations in their construction. The alterations that were made were done in order to benefit those who used this structure; thus form was highly influenced by function. As the *palaestra* was used primarily for exercising, effort was made in order to keep this area cooler to use, as the heat in North Africa was much more intense than elsewhere in the Roman world. Many concessions were made to achieve this, with the first being to construct the *palaestra* in the north or east end of the baths so that it was furthest away from the sun when it was at its hottest in the afternoon. Other alterations to lessen the temperature in North African *palaestae* included ensuring that the hot rooms were at the opposite end of the baths, away from the *palaestra*, as well as to ensure that there were other rooms between the *palaestra* and this hot section of the baths. Furthermore it was typical to construct a cold pool within close proximity to allow quick and easy access for cooling down.

Some other unique features of North African *palaestrae* included the methods of their construction. Not surprisingly *opus africanum* was the most common building technique used in the construction of baths and their *palaestrae*; however other methods were also used. The method used depended upon the availability of raw materials, which also affected the types of building materials used for the colonnades and floor coverings. Of course, as *palaestrae* were primarily used for recreational and athletic exercise, many of their floors were paved with sand or dirt, as at Gigthis and Oued Athmenia, allowing for a much softer surface when engaging in such physical exercises.

In general, the function of North African *palaestrae* was similar to the function of *palaestrae* elsewhere in the Roman world; they were primarily used for exercise, particularly suggesting exercises involving athletics. During the first two centuries AD, North Africa had an athletic culture, as is evident from the presence of *palaestrae* at such sites as Lepcis Magna and Carthage, and the references made to North African athletes competing or performing, at Rome. Although North Africa undeniably had an athletic culture, there is little early evidence available demonstrating that actual athletic competitions were held. The evidence suggests that those early athletic competitions that were given were as a form of munificence, such as at Caesarea during the reign of Juba between 27 BC – AD 23.

However, athletics in North Africa continued to grow, becoming more accepted locally, as well as internationally, enticing athletes from abroad to participate in some of the larger athletic festivals. Two large athletic festivals were instituted at Caesarea, while another two were instituted at Carthage around the beginning of the 3rd century. The existence of these larger festivals is corroborated by inscriptions and literary sources, as well as alluded to in some of the athletic mosaics from North Africa. The largest *palaestrae* in North Africa were constructed along the coast, primarily due to the large populations, but their location also provided easier access to athletes arriving from abroad. Inscriptions and artwork, as well as the increasing appearance of *palaestrae* around the end of the 2nd to the beginning of the 3rd century AD, corroborate that athletic competitions were more frequently held in local communities as well. In these instances, however, they still appear to have been given as a form of munificence.

Although *stadia* were built to house athletic competitions, evidence for such facilities is found only at Carthage and Apollonia, suggesting that elsewhere other structures were used. The *palaestra* was the most likely structure to accommodate athletic competitions because many of them, such as at Caesarea, Lepcis Magna and Gigthis, were large enough to house both athletes and spectators. References made by North African writers, inscriptions and artwork further add to the likelihood that athletic competitions occurred within *palaestrae*. Although larger *palaestrae* were quite capable of housing most athletic competitions, smaller ones could only hold such contests as boxing and wrestling.

Regardless of what types of athletic competitions North African *palaestrae* accommodated, it is certain that they all acted as locales for athletic exercise and training. North African writers, such as Tertullian and Apuleius, clearly place athletes exercising and training in the *palaestrae*. The frequent presence of athletic artwork in baths also suggests that baths and their *palaestrae* were areas that were quite suitable for athletic exercise. Finally the design and layout of *palaestrae* was specifically constructed in order to provide those exercising with the most comfortable and accommodating space possible.

Though exercise, particularly athletic exercise, was the primary function of North African *palaestrae*, they did provide other functions. All types of recreational games, including word and ball games, were played in the *palaestra*. The evidence for benches at Sufetula and the Large East Baths at Thamugadi, reveal that these areas were also used for relaxation, study and discussion. Many *palaestrae*, such as at Lepcis Magna, Mactaris and Gigthis, also opened into adjoining rooms, which could easily have provided areas for quiet reflection away from the grunting and groaning of exercisers. These adjoining rooms were also used for medicinal or massage treatments. The small rooms off of the *palaestra* at Hammam Des Beni Guecha are small and private enough to suggest that they provided exactly these types of services.

North African *palaestrae* functioned similarly to those *palaestrae* from elsewhere in the Roman world. Their function was to offer suitable spaces for exercise, and in particular for athletes to exercise and train. Although this was their primary function they still provided other services, as is clear from the evidence. Unlike *palaestrae* from the rest of the Roman world, however, those in North Africa had to follow different construction guidelines because of the hotter climate. Thus form was influenced by function. The criteria created in this thesis should help to better identify *palaestrae* in the North African archaeological record.

Appendix One: Meaning of *Gymnasium*

There are more than 50 inscriptions from Roman North Africa which include the word *gymnasium* or some form of it. However, the precise meaning of the word is unclear. What is certain is that, unlike in the Greek East, it did not denote any type of structure.[1] Instead inscriptions mentioning a *gymnasium* refer to some type of munificence donated to the local population. Currently there are two avenues of thought regarding the meaning of this word. The first suggestion is that *gymnasium* refers to a "distribution of oil", with the underlying assumption that it is for the baths. Hugoniot, Duncan-Jones, Lancel, and Veyne are advocates of this theory.[2] There is much evidence used to support this supposition. In Italy the term used for oil is *oleum* (olive oil) and is therefore much more clear in meaning. This gift of oil is also sometimes followed by an *epulum* (banquet). In North Africa however, it is a *gymnasium* that accompanies an *epulum*.[3] Therefore the argument is made that the translation of *gymnasium* as a "distribution of oil" is most likely, because it is sequentially the same as those inscriptions in Italy that say *epulum et oleum*.[4]

There is other evidence to support the idea that the term *gymnasium* replaced *oleum* in North Africa. Two inscriptions found outside of North Africa, both state that

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[1] However when St. Augustine uses this term he seems to be referring to a structure. See for example, St. Augustine, *Episcopi Epistolae Secundum Ordinem Temporum nunc primum Dispositae, et Quatuor in Classes Digestae, Epistola* 118.2.9: *Tu vero cum et in gymnasia cogitationem injecisti, et ea quoque ipsa invenisti talibus rebus nuda atque frigida….*

[2] C. Hugoniot, *Les Spectacles de l'Afrique Romaine: une culture officielle municipale sous l'Empire romain* (Paris, 2003) p.497, R. Duncan-Jones, *The Economy of the Roman Empire : Quantitative Studies* (Cambridge, 1982) p.81, n.6, S. Lancel, "*Populus Thabarbusitanus* et les *gymnasia* de Quintus Lappianus" *Libyca* 6 (1958) pp.150-151, and P. Veyne, *Le pain et le cirque* (Paris, 1976) p.365, n.313.

[3] See for example *gymnasium* inscriptions nos. 1, 2, 4-6, 12, 13, 17, 18, 21, 22, 24-26, 28-31, 34, 35, 38, 40, 41, 43, & 44, in Appendix Four.

[4] Lancel (1958) p.151.

gymnasia were provided along with free bathing.[5] First the meaning of *gymnasia* must be distributions of oil, because they also follow the combination of the other well-attested oil and bath inscriptions, same as the *epulum et oleum* examples.[6] Secondly, these distributions of oil were meant for the baths because they were tied to the free bathing that was provided. That a distribution of oil was provided to bathers is well attested in the Greek East, and the Latin West.[7] An inscription from Theveste, Algeria strengthens this idea and suggests that this was the case in North Africa as well. In this example a benefactor provides *gymnasia*, which were in the baths (*in thermis*).[8] Fagan uses all of this evidence to argue that it made sense for North African benefactors to give a *gymnasium*, in the baths, along with a banquet, because Romans bathed right before the evening meal.[9] Thus it was reasonable to provide a "distribution of oil" in the baths, followed by a banquet.

The argument for the translation of a "distribution of oil" does, however, possess some problems. One is that the term *gymnasium* is not always combined with benefactions that would make a "distribution of oil" sensible. Some of the donors in North Africa provide a *gymnasium* along with boxing displays or some other spectacle. According to an inscription fount at Villa Magna, the donor exhibited a boxing display and a *gymnasium* (*spectaculum pugilum et gymnasium exhibuit*).[10] Clearly in this example the boxing display is connected with the *gymnasium*, suggesting that a "distribution of oil" might not be the correct translation. It is true that athletes anointed themselves in oil, but the use of the word *exhibuit*, suggests that the *gymnasium* was some type of spectacle, same as the boxing display.

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[5] G.G. Fagan, "Gifts of Gymnasia: A Test Case for Reading Quasi-Technical Jargon in Latin Inscriptions" *ZPE* 127 (1999) p.268. For the inscriptions: *AE*, 1953.21 = *ILER*.1732 from Lucurgentum, and *AE*, 1989.420 from Singilia Barba.

[6] Fagan (1999) p.268.

[7] Cassius Dio, 37.51.4 and 49.43.3, and Suetonius, *Nero* 12.3. See also *CIL*, 5.5279 = *ILS*.6728, *CIL*, 14.2112 = *ILS*.7212.II.29-31, and *CIL*, 11.3811 = *ILS*.6583. For other examples see Fagan *ZPE* 127 (1999) pp.268-269, n.22.

[8] *CIL*, 8.1858 = *ILAlg*.1.3040.

[9] Fagan *ZPE* 127 (1999) p.268. For Romans bathing right before the evening meal see Martial, *Epigrams*.4.8.

[10] *CIL*, 8.895 = 12425 = *ILS*.5074.

Another problem with this argument is that in Italy, the term *oleum* is used, not *gymnasium*. Although Fagan rightly points out that this may be due to a regional difference in terminology, the word *oleum* was not foreign to North Africans.[11] An inscription from Hr. Mettich has the plural form of the word *oleum* (*ol*[*ei*]) showing that it was used on North African inscriptions.[12] Therefore, as this word was clearly known, why was *gymnasium* used to refer to a "distribution of oil" instead? A third problem involves the location of where *gymnasia* were given. Except for the inscription from Theveste, there are no others that specifically mention where these types of gifts were given. Fagan argues that perhaps "in the baths" was always implied. Although possible he adds that this would make the Theveste inscription, which mentions the baths, redundant.[13] Regardless of the lack of evidence, this "distribution of oil" is assumed to have occurred within the baths.

The many problems associated with this idea have led some scholars, such as Coleman, Leschi, Gsell, and Wilson, to argue that *gymnasium* should translate as a "gymnastic/athletic display or competition."[14] One reason for arguing this is that quite often the benefactor exhibits a *gymnasium* along with some other spectacle, such as boxing contests (*pugilum certamina*) or theatrical displays (*ludi scaenici*).[15] Fagan points out that even when a *gymnasium* is given with a banquet, it could still refer to a "gymnastic/athletic display or competition" because entertainment was frequently given to the elite while dining.[16] The translation of "gymnastic/athletic display or competition" could be read in the Theveste inscription, mentioned above, equally as well. That *gymnasia* were given in the baths is no problem because baths were well equipped for these types of athletic activities.

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[11] Fagan *ZPE* 127 (1999) p.268. Therefore the two examples outside of North Africa that use the term *gymnasium* to mean distributions of oil could be correct in that part of the Roman Empire.

[12] *CIL*, 8.25902.1,3. The Latin name of the site is *Fundus villae Magnae Varianae sive Mappalia alia siga*.

[13] Fagan *ZPE* 127 (1999) p.268. Fagan *ZPE* 127 (1999) p.269 also uses cost as an argument against the term gymnasium meaning distributions of oil. However as he says in the end "there are too many intangibles… to make [any] comparison telling."

[14] K.M. Coleman, "Ptolemy Philadelphus and the Roman Amphitheatre" in W.J. Slater, *Roman Theater & Society: E. Togo Salmon Papers* (Ann Arbor, 1996) pp.49-68, esp.p.56, L. Leschi, *Études d`épigraphie, d`archéologie et d`histoire africaines* (Paris, 1957) p.315, S. Gsell, *Inscriptions Latines de l'Algérie*

As with the first argument, there are some problems with the idea that *gymnasium* translates as a "gymnastic/athletic display or competition" as well. The first is why is this term used instead of other more normal terms for gymnastic/athletic displays? More often in literary works and on inscriptions outside of North Africa, the terms *ludi gymnici*, *certamina gymnica*, and *agon gymnicus* are used.[17] There are no examples of these terms on any of the North African inscriptions but there is mention of an athletic spectacle (*spectaculo at*[*h*]*letarum*) on an inscription that comes from Limisa, Tunisia.[18] This latter inscription would suggest that there was a term specifically designating gymnastic/athletic displays or competitions.

Another problem with this hypothesis is that a *gymnasium* is quite often distinctly given apart from other spectacles. At Tuccabor a benefactor paid for boxing contests

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(Rome, 1965) no.1.3040, and A. Wilson, *Water Management and Usage in Roman North Africa: A Social and Technological Study*, 2 vols. D.Phil. dissertation (Oxford, 1997) vol.2, p.305, n.187.

[15] *Gymnasium* inscriptions nos. 3, 5, 9, 28, 42, 44, & 50 in Appendix Four.

[16] Fagan *ZPE* 127 (1999) p.266. He also mentions that when the *gymnasium* was specifically given to the people and a banquet to the elite (see above, ft.3, for a list of examples) the elite could still enjoy the gymnastic/athletic displays or competitions.

[17] See for example Suetonius, *Augustus* 98.5, Suetonius, *Nero* 53.1, Pliny the Elder, *NH*.7.205, 28.50, and 35.75, SHA, *Gall*.3.7, *CIL*, 3.6829 = *ILS*.5070, and *CIL*, 6.33992 = *ILS*.5176.

[18] *KSL*.183, & Z. Benzina Ben Abdallah, « Catalogue des Inscriptions Latines Inédites de Limisa (Ksar Lemsa) » *AntAfr* 40-41 (2004-2005) pp.124-125.

(*pugilum certamina edidit*) and gave gifts to the decurions (magistrates) and a banquet and *gymnasium* to the people (*decurionibus sportulas et populo gymnasium epulum dedit*).[19] Here the *gymnasium* is separated from the boxing contests and is more associated with the other gifts. Fagan also points to another inscription from Theveste, which lists 64 days of the year in which *gymnasia* are given to the people.[20] He notes that based on the dates of when these *gymnasia* were supposed to be given, they averaged a little more than one a week. He argues that the translation could not mean "gymnastic/athletic displays or competitions" because they would not be as entertaining for people if staged with such frequency.[21] There is nothing to suggest however that these types of displays would have suffered any such lack of enthusiasm if frequently put on. Many sporting events today, such as hockey and baseball, are played everyday and they are actively watched and enjoyed by millions of people.

The consensus reached from this dilemma is that in North Africa the term *gymnasium* meant both a "distribution of oil", and a "gymnastic/athletic display", depending on the context of the inscription. Both arguments possess enough evidence to show that the term *gymnasium* had two possible meanings in North Africa. Fagan adds that the precise meaning of this term likely shifted depending on the region in which it was used.[22] Therefore although it meant a "distribution of oil" in some areas of Roman Africa, it could also mean gymnastic competitions in other places.

However another possibility exists for the meaning of this term. This paper will suggest that the term *gymnasium* in North Africa should translate as "gymnastic oil", thus combining the two possibilities offered above. This idea would imply that the oil was primarily used for gymnastic exercise, or competition. It cannot substantiate that every time a *gymnasium* was donated, the oil was strictly used for athletic competition or exercise, only that its primary purpose was for some type of exercise. Those reading the inscription would understand what the gymnastic oil was intended for.

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[19] *CIL*, 8.1223 = 14855.
[20] *CIL*, 8.1859 = *ILAlg*.1.3041.
[21] Fagan *ZPE* 127 (1999) p.267.
[22] Fagan *ZPE* 127 (1999) p.271. He does however believe that the majority of the time the word translated as distributions of oil.

The translation of "gymnastic oil" also helps to alleviate some of the problems encountered with the other two possible definitions. The first problem that it helps to resolve revolves around where the term *gymnasium* is placed in North African inscriptions. An inscription where the benefactor donates a *gymnasium* with another gift, such as a banquet, is one such example. The inscription from Tuccabor fits into this category, as it states that a benefactor gave gifts to the magistrates and a banquet and *gymnasium* to the people.[23] Those arguing for a meaning of a "distribution of oil" ask that, if the *gymnasium* was supposed to mean a gymnastic display, why not refer to it along with the boxing display, which was mentioned earlier in the inscription? Although a valid point, translating *gymnasium* as "gymnastic oil" would make the inscription clearer. I would argue that the placement of the "gymnastic oil" with the banquet implies that this oil was meant for the people of Tuccabor, even though the boxers likely used it for their competition. As a gift provided along with the banquet, the benefactor emphasized that the *gymnasium* was meant for the people, to use for recreational exercise. Thus translating the term as "gymnastic oil" is quite plausible.[24]

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[23] See above p.146 for this inscription.

[24] No argument has ever been made to suggest that the distribution of oil was meant for dining. Even in the inscription from Uccula (*CIL*, 8.14365), and Limisa (*KSL*.183, in Abdallah (2004-05) pp.124-125) when a *gymnasium* is given with wine (Uccula: *gymnasium vinumq(ue) dedit* and Limisa: *gymnasium / et vinum passim dedit*), it is not believed to be edible. Fagan *ZPE* 127 (1999) p.268, explains that this combination is easily explained by the fact that Roman bathing, with oil, is known for stimulating thirst. Ael.

This translation also applies to inscriptions where a *gymnasium* is undoubtedly connected with another spectacle. For example the inscription from Villa Magna clearly has the *gymnasium* associated with the boxing display, making it apparent that the term also referred to some type of spectacle.[25] It is true that in cases such as this, the literal translation of "gymnastic oil" is awkward. Therefore a North African reading this would probably translate this as a gymnastic competition, but with the clear understanding that the donor supplied oil for these events. Whether associated with another spectacle or some other gift, the translation of *gymnasium* as "gymnastic oil" fits in easily in both, as a reader would understand what was being emphasized in either scenario.

Another issue concerning a *gymnasium*, when given in North Africa, is that the benefaction is presumed to be associated with the baths. As a "distribution of oil", scholars such as Fagan take for granted that it meant a gift of oil used in bathing. He does however note that this notion made the Theveste inscription, which actually stated that the *gymnasium* was in the baths, oddly redundant.[26] A distribution of oil did not necessarily mean it was for bathing. Even when translated as 'gymnastic oil', to be used for some type of gymnastic contest, or exercise, it is still quite plausible to imagine that these activities occurred within the baths. It is conceivable that athletic exercise and competition could occur practically anywhere, provided there was enough space, as even some Roman-period houses had areas that could have been used for athletic exercise.[27]

Arist.25.311; Celsus, *De Medicina* 1.3.6-7; Pliny the Elder, *NH.*14.139-140, and *CIL*, 11.6360 where bread, wine and oil in the baths are given to the people.

[25] See above p.143 for this inscription.

[26] Fagan *ZPE* 127 (1999) p.268.

[27] For examples of villas in Italy with facilities for exercise see Cicero, *De Legibus* 2.6; *Q.fr*.3.9.7; *Ad Atticum* 2.4.7; *De Oratores* 1.98, Pliny the Elder, *NH*.35.5.2, Vitruvius, *De Architectura* 6.5, and Varro, *RR*.2.*Praef*.2; *RR*.3.13.1. See also N.B. Crowther, "The *Palaestra*, Gymnasium and Physical Exercise in Cicero" *Nikephoros* 15 (2002) esp. pp.165-166.

However, I would still argue that when a benefaction of "gymnastic oil" was given the presumption that it was distributed in the baths should persist.[28]

In conclusion, it is my view that the word *gymnasium*, on North African inscriptions, means "gymnastic oil". This definition has the underlying assumption that this oil is intended for athletic competition or exercise, depending upon the context of each inscription. I believe that, this "gymnastic oil" was distributed and used in the baths even though athletic activities could occur anywhere with adequate space. Therefore even though the majority of *gymnasium* inscriptions do not specifically state that this benefaction of "gymnastic oil" was for use in the baths, this is the most likely supposition.

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[28] Although this oil was likely distributed for those attending the baths, I have translated the term *gymnasium* as 'gymnastic oil', rather than as 'bath oil', in order to keep more closely to the Latin term used; *gymnasium*.

Appendix Two: The Terminology of North African *Palaestrae*

The word *palaestra* was not foreign to North Africans, as authors used the term in one form or another on many occasions. Apuleius (2nd century AD) talks about individuals who enter the *palaestra*, while Tertullian (2nd & 3rd centuries AD), when comparing athletes to Christians, notes that one must exercise in the *palaestra* before competing in the actual contest.[1] Tertullian also refers to a *palaestra* in his work *De Pallio* saying that it was where exercises occurred.[2] These examples show that North Africans were aware that the *palaestra* was a place where exercise, especially for athletes, occurred, and writers therefore used the term accordingly. Other forms of the word were used to identify those who frequented the *palaestra*. In Apuleius' *Apologia* a *palaestrita*, or wrestler, is mentioned and then later the grace and vigour of a *palaestricus* (someone belonging to a *palaestra*) is described.[3] In his *Metamorphoses*, Apuleius uses the word *palaestritae* to describe wrestlers.[4] Although the story takes place in Greece, Apuleius is a North African writer who likely draws on his knowledge from this region when telling his story.[5]

These examples reveal that North African writers were aware of the term *palaestra* and its application to a certain type of structure. Despite this, however, the word *palaestra* does not appear on North African inscriptions. Its absence in the epigraphic record suggests the likelihood that other terms were used to identify this space.[6] A careful examination of the epigraphic evidence from North Africa will suggest a few alternative possibilities.

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[1] Apuleius, *Florida* 16 and Tertullian, *Ad Martyras* 3.5. It is also interesting to note that Tertullian uses the word stadium when describing where the actual contest takes places.

[2] Tertullian, *De Pallio* 4.1.1. *Studia* is translated here into exercise, however it has many meanings that could include study in literature or speaking. Tertullian continues on to mention sand, mud and their diet, all associated with athletics: *lutea unctio et puluerea uolutatio, arida saginatio*. See below for further discussion on this passage.

[3] Apuleius, *Apologia* 43.2 and 63.7 respectively.

[4] Apuleius, *Metamorphoses* 1.15: *An ignoras, inepte, nudum nec a decem palaestritis despoliari posse*?

[5] See F. Millar, "The world of the *Golden Ass*" *JRS* 71 (1981) pp.63-75 and S. Harrison, *Apuleius: A Latin Sophist* (Oxford, 2000) for a discussion on Apuleius and his description of the Greek world.

a) *porticus*

One alternative term used to identify a *palaestra* is *porticus*.[7] There are a handful of examples of North African bath inscriptions, which include the term *porticus*. Considering the context and association of this term on these inscriptions, it almost certainly implies the presence of a *palaestra*. A very fragmentary inscription from Henchir Haouli indicates that local citizens restored and extended some baths within the city. One significant area worked on was the portico, which was returned to its previous condition.[8] Another more complete inscription, which was reused in the construction of a Byzantine fortress in Thuburbo Maius, describes a bath with a large pool surrounded by a bronze balustrade, a garden with a portico and a *pronaos* (porch) with a portico.[9] Another inscription comes from Colonia Vallis and it simply mentions a portico in the baths (*port*(*icum*) (*t*)*hermar*(*um*)).[10] All three of these inscriptions mention baths that have not been uncovered and therefore it cannot be determined archaeologically if these porticoes resembled *palaestrae* in anyway. It is only an assumption that these porticoes refer to *palaestrae* and not porches.

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[6] This was not the only occasion where a different word was used to identify a space in North Africa. J. Delaine, "The '*Cella Solearis*' of the Baths of Caracalla: A Reappraisal" *PBSR* 55 (1987) pp.147-156, has shown that a different word other than *caldarium* (hot room) was used in North Africa in the 4th and 5th centuries AD. North Africans, for some unknown reason, opted to use the words *cella soliaris* when referring to hot baths. The same thing undoubtedly happened for the word *palaestra*, but its alternative term is unknown. See also the discussion on the word *gymnasium* and its other definitions in North Africa in Appendix One.

[7] Petronius, *Satyricon* 29 uses the term portico twice when describing some of the features of a bath. In his second mention he also notes a group of exercisers with their trainer under the portico. In this instance the portico must be an alternative word used to refer to the *palaestra*.

[8] *AE*, 1934.133 = *ILTun*.622: … / {*a*}*egatis* / [*p*]*ulcerrimum factum cum porticus* / [---] *turpia foedabantur ad statum* I / [*pisc*]*inalis ad restaurationem d*/[…] …. Other restorations included the pool area, *cella soliaris* and a few other uncertain rooms.

[9] *CIL*, 8.2369, 2370. See the section on the Filadelfis Baths at Thuburbo Maius in Appendix Three for more information on this inscription.

[10] *CIL*, 8.1285 = 14781.

A more convincing example comes from Cyrene and dates to the reign of Hadrian (AD 117-138). The inscription states that Hadrian ordered the bath, with its porticoes and rooms for playing ball, and other adjacent buildings, destroyed and gutted by fire in the Jewish uprising, be restored for the citizens of Cyrene (*balineum cum porticibus et sphaeristeris ceterisque adiacentibus quae tumultu Iudaico diruta et exusta erant civitati Cyrenensium restitui iussit*).[11] That the porticoes are specifically mentioned along with the rooms for playing ball, suggests that they were also used for some type of activity, such as exercise. It is unfortunate that the description of this bath is not linked to any of the baths uncovered in Cyrene, making it is impossible to determine for certain if the porticoes actually referred to *palaestrae*. A similar inscription comes from Aubuzza. It mentions the construction of rooms in a bath, which included one for playing ball games, a portico, a *caldarium* (hot room) and a *cohors* (*paganicu*[*m*] *et portic*[*um*] / *et caldar*(*ium*) *et c*(*o*)*horte*(*m*)).[12] Once again a room for playing ball and a portico are mentioned together suggesting that they provided similar activities. As at Cyrene, no bath in Aubuzza is linked to the inscription.

One interesting inscription from Madaurus does provide the name of a bath with a portico. It states that in the Summer Baths, there is a portico as one enters from the courtyard (*atrium*), and likewise a porch (*pronaum*) linked to the same courtyard as one moves down the street (*porticum quo*[*q*]*ue ingredientibus ab atri*[*o*], *sed et pronaum eidem coh*(*a*)*erentem commeantibus per viam*).[13] Thébert and Fagan both believe that the Summer Baths at Madaurus are those commonly referred to as the Large Baths.[14] If correct, it is possible to compare this description with the plan of these baths (Figure A20.2). One can surmise from the bath plans that the *atrium* is located immediately after entering from the street. The portico is next, situated just east, followed by the entrance into the bath complex. The inscription continues, however, mentioning that a *pronaum* also linked to this same (*eidem*) courtyard (of the portico?), as one moved down the street.[15] If interpreted correctly, the courtyard was an extension of the first

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[11] *AE*, 1928.2.

[12] *CIL*, 8.16369: *Eron*(*is*) *paganicu*[*m*] *et porticu*(*um*) *et caldar*(*ium*) *et c*(*o*)*horte*(*m*) *cum omnibus ornamentis a solo s*(*ua*) *p*(*ecunia*) *fec*(*it*). G. Fagan, *Bathing in Public in the Roman World* (Ann Arbor, 1999) p.257, notes to # 83 suggests that the word *paganicum* refers to some type of room where a ball game called *pila paganica* is played. Martial mentions this game in his *Epigrams* 7.32.7. Fagan's hypothesis seems most likely. See below for further discussion on the word *cohors*.

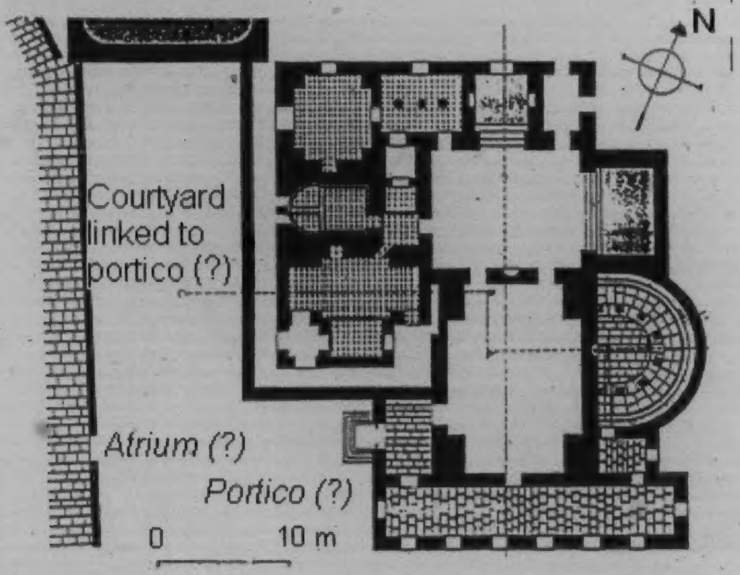

Figure A3.11.2

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[13] *ILAlg*.1.2101. See below for other possible meanings for this inscription.

[14] Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.512 and Fagan (1999) p.277. See the Large Baths at Madaurus in Appendix Three. The section also discusses why these baths are suspected to be the Summer Baths mentioned in this inscription.

[15] The word *pronaum* is a little unclear but it may refer to some type of porch. This is the word that Fagan (1999) p.277, # 129 uses when translating the Latin term.

portico, but located to the north somewhere along the length of the adjacent street.[16] The area between the street and main bath complex is where Gsell and Joly suspect there was a *palaestra*.[17] Therefore the term *porticus* in this inscription is used to identify a *palaestra*.

Perhaps the inscription best indicating that the word *porticus* identified a *palaestra* comes from Thugga.[18] The inscription was written on lintels that were later reused in the construction of a Byzantine fortress. As one of these lintels carried the name of the Licinian Baths (*thermae* [*Lic*]*inianae*), Poinssot et Lantier believe them to have initially come from these same baths and more specifically that they were positioned atop of the colonnades in the room, which they identified as the *palaestra*.[19] The inscription mentions a *porticus*. Therefore it is plausible to speculate that this inscription commemorated the construction of a portico, which in the Licinian baths functioned as a *palaestra*. This is the strongest evidence available suggesting that in North Africa the word *porticus* was sometimes used to indicate the presence of a *palaestra*.

b) *atrium*

Although the word *porticus* was used occasionally to identify a *palaestra*, other terms were also used. Another alternative is the word *atrium* (courtyard). The inscription from Madaurus, discussed above, provides one example of this.[20] This inscription mentions that the courtyard (*atrium*) is located somewhere to the north adjacent to the street, in the vicinity of where a *palaestra* is suspected. One problem with this interpretation however is that the porch (*pronaum*) could be associated with the *atrium*. In this scenario the courtyard of the *atrium* is what encompassed the north area. Therefore in this interpretation, it is the term *atrium* that is used to identify the *palaestra*.

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[16] See the discussion below on the word *atrium* possibly being used as a term to identify a *palaestra* in North Africa.
[17] S. Gsell & C.A. Joly, *Khamissa, Mdaourouch, Announa, II, Mdaourouch* (Paris, 1922) p.94.
[18] *CIL*. 8.26559 = *ILTun*.1416.
[19] Poinssot & Lantier, *BAC* (1925) pp.XXXI-XXXII. See the section on the Licinian Baths at Thugga in Appendix Three for more on this inscription.
[20] See above and below for alternative meanings of this inscription.

Another inscription suggesting that the term *atrium* was a term used to identify a *palaestra* in North Africa comes from the Licinian Baths at Thugga.[21] This inscription, one third of which was found inside of the baths, mentions the construction of an *atrium* within the baths. Thébert rightly believes that this *atrium* refers to the peristyled room just off the entrance into the baths, but he also notes that its appearance is very similar to the *palaestra*.[22] Its resemblance to the *palaestra* on the other side of the Licinian Baths, brings up a couple of interesting points.[23] The first is that the term *atrium* could certainly be used to identify a *palaestra* in North Africa because they both share a similar form. The second thing to note is that since these spaces share a similar form, archaeologists need to reconsider the overall function of spaces they have identified as *atria*.

c) *cohors*

Another term used to identify a *palaestra* is the Latin word *cohors* (courtyard). There is one bath inscription from North Africa that supports this view. It comes from Aubuzza and it mentions the construction of a ball room, portico, *caldarium* and *cohors*.[24] The possibility that the term *porticus* from this inscription referred to a *palaestra* has already been put forward. However, it is equally possible that the word

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[21] *ILAfr*.573, *ILTun*.1500, *AE*, 1925.31 and Poinssot et Lantier, *BAC* (1925) pp.XXXII-XXXIII.
[22] Thébert (2003) pp.177-178.
[23] See the section on Thugga in Appendix Three for more on this inscription.
[24] *CIL*, 8.16369.

cohors refers to a *palaestra*. In either case, these undiscovered baths at Aubuzza possessed a *palaestra*, and one of these two words was used to describe this space.

d) *xystus*

One final term possibly used in North Africa to identify an area for exercise is *xystus*. The word was used in Republican Rome to describe a location where exercise occurred. Cicero says that athletes/wrestlers (*palaestritae*) used the *xystus*.[25] In Imperial Rome, Vitruvius notes that the *xysta* was an open area where athletes could exercise in good weather.[26] This suggests that, at Rome, athletes used an open colonnaded area for exercise and training. This term was also used to identify a location for exercise in North Africa. Unlike the previous three terms discussed, the term *xystus* does not appear on any North African inscriptions dealing with baths or athletic spectacles. It does, however, appear on inscriptions dealing with other structures, such as the theatre.[27] On the other hand, the *xystus* is used once in the literary sources with regard to athletic activity. Tertullian uses the word when describing the vanity of athletes.

> *Nihil est nobis dictu visu auditu cum insania circi, cum impudicitia theatri, cum atrocitate arenae, cum xysti vanitate.*[28]
>
> We have nothing to do with the madness of the circus, with the obsceneness of the stage, and the cruelty of the amphitheatre, and the vanity of the *xystus*.[29]

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[25] Cicero, *De Optimo Genere Oratorum* 3.8: But if that is all their merit, then they may deserve to be regarded as sound and healthy, as if we were regarding athletes, to such an extent as to be allowed to walk/spread (exercise?) in the *xystus*, but not to be entitled to the crown at the Olympic games. (*Sed qui eatenus valuerunt, sani et sicci dumtaxat habeantur, sed ita ut palaestritae; spatiari in xysto ut liceat, non ab Olympiis coronam petant*).

[26] Vitruvius, *De Architectura*.5.4. See Chapter Two for the discussion of the *xysta*.

[27] See the following inscriptions where the term *xystus* does appear: *CIL*, 8.26467, *CIL*, 8.26468, *CIL*, 8.26606, *CIL*, 8.26607 and *CIL*, 8.26608. Coincidently all five of these inscriptions are found in Thugga.

[28] Tertullian, *Apologia* 38.4.

[29] *The Apology of Tertullian*, Translation by W. Reeve (London, 1889) p.107.

Tertullian refers to the vanity of athletes because the first part of the line describes the evils associated with the other three major forms of entertainment, the circus, amphitheatre and theatre. The implication in this passage is that athletic competition or training occurred in this space/facility. It is clear that he is referring to a *palaestra*-like space, because the *xystus* was an open-colonnaded area, usually with a walkway around the perimeter.

Although *palaestrae* were constructed in North Africa, the use of the word does not appear on inscriptions. Instead other words were used to identify this space. The four words noted above were common, non-technical architectural terms with a basic meaning of colonnade or courtyard. Therefore they could be used to describe a variety of structures that were pillared, such as a forecourt, peristyle and *palaestra*. Any of them could be used to identify what is called a *palaestra* in this study. However, in order to be consistent, the Greek word *palaestra* will be used to identify the structure that is the primary subject of this thesis. The reason for this is because *palaestra* has become the accepted term used to identify this structure.[30]

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[30] See for example I. Nielsen, *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990), F. Yegül, *Baths and Bathing in Classical Antiquity* (New York, 1992), Fagan (1999), and Thébert (2003).

Appendix Three: Distribution and Identification of North African *Palaestrae*

Identification of North African *palaestrae*

After examining the evolution of *palaestrae*, in chapter two, it was discovered that most Roman *palaestrae* shared six common features. These common characteristics were that: 1) they are located at the edge of baths, 2) they have a courtyard, 3) they are open to the sky, 4) they are surrounded by columns, 5) they are attached to bathing rooms, and 6) they open into other rooms whose function is not bathing. After applying these criteria in order to identify *palaestrae* in North Africa, I have determined that there are twenty-one known *palaestrae* which share these common characteristics. In addition to these twenty-one, it was also possible to identify three other *palaestrae* in North Africa (Carthage, Mactaris, and Utica). These three satisfied all of the criteria except for the first, as they were not located at the edge of the baths, but rather located in the center of the baths. They are included in this study because they closely resemble the earlier Roman Imperial baths that possessed open-air *palaestrae*, such as the Baths of Trajan and the Baths of Caracalla, whose *palaestrae* were located within the centre of the baths. Therefore a total of twenty-four *palaestrae* have been identified in North Africa.

Of the twenty-four different *palaestrae* identified in North Africa, most are located in urban contexts. As can be seen from the accompanying map, 19 of these are clustered together between the east coast of Tunisia and the site of Lambaesis in east Algeria (Map 3.1). Out of this cluster, four of the largest *palaestrae* are located around the periphery in the cities of Carthage, Utica, Thysdrus and Lambaesis. The latter is located inland, whereas the others are all located on the coast.[1] All the other *palaestrae* in this cluster are located inland. The large population in this region of North Africa certainly factored into where *palaestrae* were constructed, as many veteran colonies were established here during the first two centuries AD. This is one explanation to account for the large percentage of *palaestrae* found in this area. Another reason is due to the intensive archaeological work done in this area in the late 19th and early 20th centuries AD. As it was a more heavily populated area, the communities were larger and therefore more ruins remained, enticing archaeologists to explore them.[2]

Five of the *palaestrae* identified in North Africa are situated outside of this cluster. Three of these are located along the coast in the cities of Lepcis Magna (Libya), Gigthis (Tunisia), and Caesarea (Algeria). The remaining two *palaestrae* found outside of the major cluster in Tunisia and Algeria are situated at Thamusida and Volubilis in inland Morocco.

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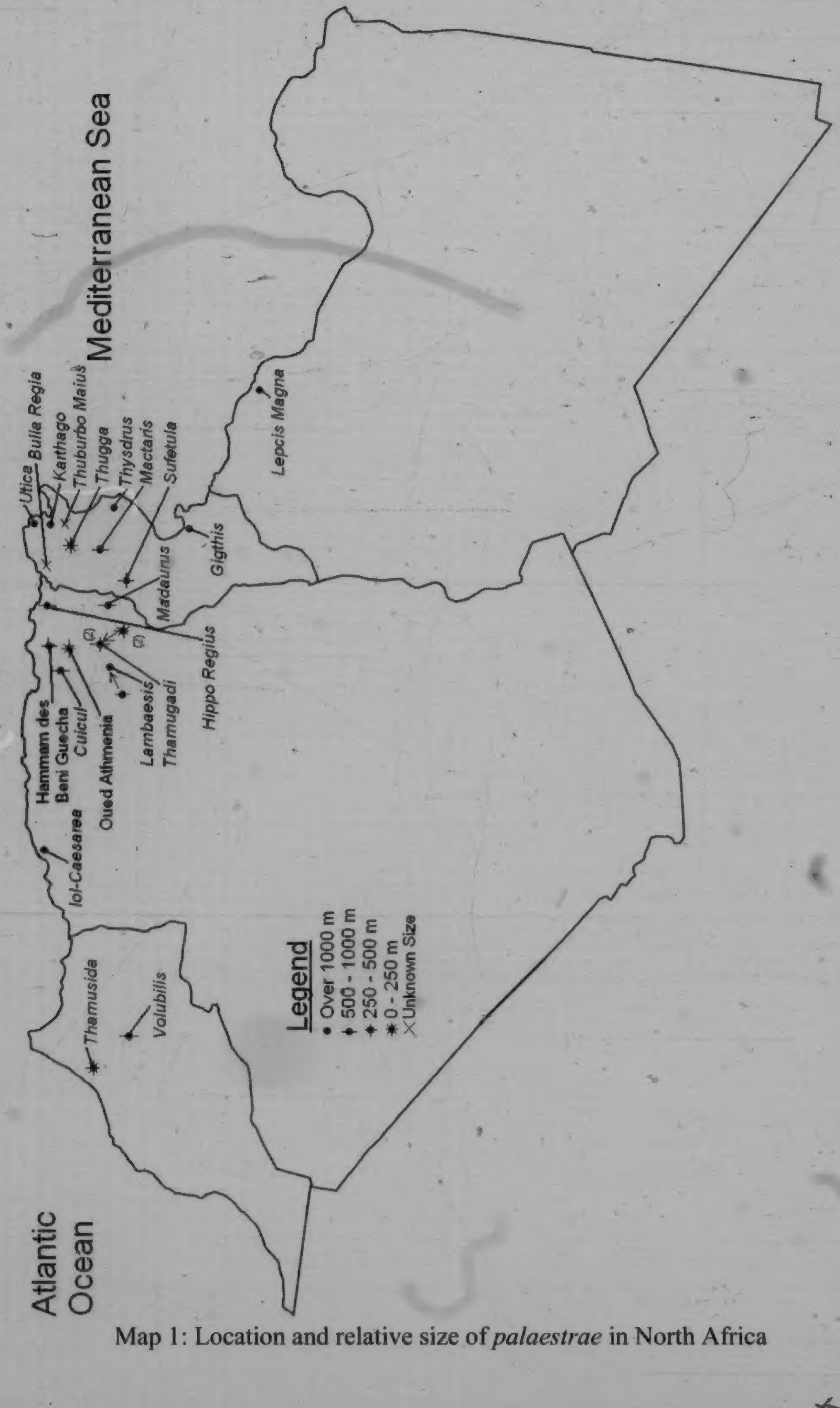
[1] See Chapter Three for the discussion on the size of *palaestrae*.

[2] Further excavation in other areas of North Africa may determine a more even distribution of *palaestrae*, rather than just in Tunisia and east Algeria.



Map 1: Location and relative size of *palaestrae* in North Africa

Distribution of *palaestrae* in North Africa

a) Location of *palaestrae* in urban communities

Of all the *palaestrae* identified in North Africa, 22 were located in urban communities. It was the baths rather than the *palaestrae*, which determined their location within their urban communities. Most of the baths with *palaestrae* in North Africa are situated around the edge of cities. Available space played an important role in where baths were constructed. Amphitheatres and circuses were often built on the outskirts of communities because that was where there was available space for such large structures.[3] Large baths also required ample space and therefore the edge of a community was often the only possible choice. Another reason for constructing baths on the outskirts regarded the safety of the community. Roman baths had furnaces that were continually stoked in order to keep such rooms as the *caldarium*, *tepidarium* and *laconium* heated. This meant that fire was a constant danger to both the baths and neighbouring structures.[4] If a bath did catch fire, having it on the edge of a community reduced the risk of flames leaping to other buildings. One last benefit for constructing baths with *palaestrae* on the outskirts of a community was that it provided easier access for rural populations wishing to use them.[5] When they were not found at the edge of town, they were frequently situated along some major road, rather than down a side street. This again made them much more accessible for those coming from rural areas.[6]

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[3] For example at Lepcis Magna, Carthage, Dougga, Utica and Caesarea. All of these cities had either one or both constructed on the outskirts of the city.

[4] Fires were very devastating in the Roman period. See for instance the fire that destroyed over half of Rome in AD 64. Tacitus, *Annals* 15.38-44, Suetonius, *Nero* 38, and Cassius Dio, 62.16.

[5] See the following for the discussion on Romans and their bathing. G.G. Fagan, *Bathing in Public in the Roman World* (Ann Arbor, 1999), F. Yegül, *Baths and Bathing in Classical Antiquity* (New York, 1992) and I. Nielsen, *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990).

The location of *palaestrae* within cities could also be significant in terms of the other structures around them. Some *palaestrae* were specifically integrated into the broader urban plan of a city, with the implication that they provided more than just spaces for exercise. The *palaestra* at Lepcis Magna is a good example of this. According to Yegül, the *palaestra* of the Hadrianic Baths here acted more as a civic plaza, its east colonnade relating significantly to the structures around it.[7] The rounded end of the *palaestra* was part of a carefully planned curvilinear intersection. The other structures at this intersection included a porticoed exedra and a nymphaeum. All of these structures helped to moderate the shift in direction of the three streets which converged at this point. MacDonald argues that the idea behind this was to create an architecturally dynamic focal point where traffic from the three streets could merge into a single open area. This plan gave the builders and planners of Lepcis Magna a device for emphasizing important street intersections using spatial variety and change.[8] The arragnement at Lepcis Magna therefore demonstrates that a *palaestra* could be carefully integrated into the urban plan of a city, and thus provide a broader function than just as a space for exercise.

One interesting thing to note regarding the location of *palaestrae* in urban communities is that they are not typically found near amphitheatres or circuses. As *palaestrae* were used for physical exercise, it would seem beneficial to have them situated near such entertainment structures. One could train or warm up before performing in these structures. The Imperial baths with *palaestrae* at Rome and the *palaestra* at Pompeii are situated very close to either a circus or amphitheatre, suggesting a deliberate intention. In North Africa many communities, such as Carthage, Lepcis Magna, Caesarea, Thysdrus and Utica, had both a circus and amphitheatre, while other cities, such as Bulla Regia, Lambaesis, Mactaris, Dougga and Hippo Regius, possessed at least one of these two facilities. In all instances except Lambaesis and Utica, these two facilities were situated quite some distance from the *palaestra*.[9] Although the availability of space needed for constructing such large entertainment structures certainly played a factor, baths with *palaestrae* were also constructed on the outskirts of communities for the reasons noted above. Why then were they not constructed near amphitheatres and circuses, which had open available space around them?

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[6] Some baths, such as those at Caesarea, Carthage, Lepcis Magna, Sufetula and Utica, were constructed near the coast or along a river. Constructed near water sources was advantageous because the water could be easily siphoned into the baths. Likewise bath water could easily be emptied into these sources as well.
[7] Yegül (1992) p.397.
[8] W.L. MacDonald, *The Architecture of the Roman Empire. Volume II: An Urban Appraisal* (London, 1986) pp.55-66.

Instead baths with *palaestrae* are often located relatively close to the city's theatre. In fourteen of the cities, *palaestrae* were located 250 m or less from the theatre. At Sufetula the theatre was located immediately to the east of the *palaestra*, only 50 m away. Why this proximity to one another was important is not clear but there is one possible explanation. In North Africa, athletic competitions were often given along with theatrical shows.[10] Larger festivals, such as the Pythian games at Carthage are suspected to have included musical and literary contests, just like the Pythian games at Delphi. Indeed an Odeum was constructed at Carthage around the same time these games were created.[11] Further examples include the inscriptions from many small North Africa communities mentioning that theatrical performances were given together with gymnastic oil (*gymnasium*), which was used for athletic competition.[12] As physical exercise was a primary function of *palaestrae*, perhaps they were used to stage smaller athletic competitions, such as boxing or wrestling contests. An inscription from Theveste states that a *gymnasium* was given in the baths.[13] If the term *gymnasium* referred to gymnastic oil, with the implication that it was used for athletic competition, then these competitions could take place in a *palaestra*. Therefore there appears to be a connection in North Africa between theatrical and musical performances performed in the theatre, and athletics performed in the *palaestra*. More study is necessary in order to determine whether the close proximity of these two structures was coincidental or if it was a conscious decision.

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[9] See accompanying city plan maps in Appendix Three for these sites.

[10] Gifts of *gymnasia* were almost always also given with meals (*epulum*).

[11] See Chapter One for the discussion of the Pythian games at Carthage and the evidence for athletics in North Africa.

b) Location of *palaestrae* in rural areas

The remaining 2 *palaestrae* identified in North Africa were in rural communities The *palaestra* in the Pompeianus Baths at Oued Athmenia, in Algeria, is one of these and it was a part of a villa. *Palaestrae* were commonly included within Roman villas of the wealthy elite, as is evident from the writings of many ancient authors. Cicero, Pliny the Elder, Vitruvius and Varro (1st centuries BC) all mention *palaestrae* found in villas.[14]

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[12] See for example Furnos Minos : *ILS*, 9403 = *CIL*, 8.25808b (25308?) = *AE*, 1909.162, Giufitanum (Bir M'Cherga) : *ILS*, 5073 = *CIL*, 8.858 and *CIL*, 8.860, Hr. Esch-Schoor : *ILS*, 5072 = *CIL*, 8.11998, Hr. Sidi-Naui : *CIL*, 8. 754 + 12218 (23107), Numlulis : *CIL*, 8.26121, Sutunurca : *AE*, 1909.160 = *ILA*.303, Thamugadi (Timgad) : L. Leschi, *Etudes*, (1957) pp.227-228 and *AE*, 1941.46, Theveste (Tebessa) : *CIL*, 8.16530 = *ILAlg*.1.3032, Thugga (Dougga) : *AE*,1904.115 = *CIL*, 8.26527, *CIL*, 8.26591, *CIL*, 8.1501 + 15509 (26458) = *ILAfr*.514, *CIL*, 8.26607 and *CIL*, 8.26606 = *ILS*.9364 = *ILTun*.1434, Tuccabor : *CIL*, 8.14856 and Vallis (Sidi Mediani) : *ILS*.5075 = *CIL*, 8.14783.

[13] *CIL*, 8.1858 and *ILAlg*.3040.

[14] Cicero: *De Legibus* 2.6; *Q.fr*.3.9.7; *Ad Atticum* 2.4.7; *De Oratores* 1.98, Pliny the Elder, *NH*.35.5.2, Vitruvius, *De Architectura* 6.5, and Varro: *RR* 2.*Praef*.2; *RR* 3.13.1.

These spaces were for private use and employed for all sorts of activities including physical exercise, intellectual study and socializing.

The Pompeianus Baths cover around 5000 m^2. Yegül believes that they formed part of a wealthy suburban villa, as it was decorated with sumptuous mosaics.[15] The villa had many of the typical bathing rooms, such as a *frigidarium*, *caldarium*, *natatio* and *tepidarium*. Besides these bathing rooms, however, the complex also possessed other types of rooms just east of the *frigidarium*, which J. and P. Alquier identified as the *triclinium*, *tablinum* and *oecus*.[16] Y. Thébert argues against this classification, claiming that there is nothing but the shape of the rooms to identify them. However he still believes that the overall structure did indeed belong to a villa.[17] Other indications suggesting that this structure was a villa, rather than strictly a bath, include the possible presence of stables to the south and west.[18]

Although this villa bath has not been thoroughly excavated, Thébert proposes that it had a *palaestra*.[19] It is located in the northeast end of the complex and has at times been identified as an enclosed garden and peristyle court.[20] What is known about this space is that the floor was never paved and it covers around 200 m^2, with the semi-circular pool of the bath cutting into its southwest corner. Alquier, Christofle and Berthier all hypothesize that a covered walkway existed around the edges of this area, but there is no evidence to support this theory.[21] Nevertheless, that there is a large space positioned in the northeast of the bath strengthens Thébert's hypothesis about a *palaestra* in this villa.[22]

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[15] Yegül (1992) p.249. J.J. Rossiter, "Late Antique Housing in Carthage and Its Territory" in *Late Antique Archaeology* 3.2 (2005) esp. pp.382-390 argues that there is very little evidence for many villas in North Africa.

[16] J. Alquier, « Les thermes romains du Val d'or, près L'Oued-Athménia », *RSC*, 59, (1929) pp.290-291. A. Poulle, « Les bains de Pompeianus », *RSC* 19 (1878) pp.449-451 similarly identified these rooms. These three rooms were all used for dining.

[17] Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.218.

[18] A. Berthier, « Établissements Agricoles Antiques a Ouéd-Athmenia », *BAA* 1 (1962-1965) p.9.

[19] Thébert (2003) p.219.

[20] J. Alquier « Les thermes romains du Val d'or, près L'Oued-Athménia », *RSC*, 57, (1926) p.116 and Yegül (1992) p.249 for the former belief and Alquier (1929) p.292 and Berthier (1962-1965) pp.7-20 for the latter.

The other excavated rural *palaestra* is located at Hammam Des Beni Guecha in Algeria, and was part of a thermal bath complex. Those visiting this site travelled here in order to benefit from the baths healing waters. Tests, carried out at the beginning of the 20th century, show that there were many different types of minerals within the three separate water sources supplying these baths. The three sources also reveal varying temperatures ranging from 40 to 53° C.[23] The Romans believed that baths provided both remedial and preventive measures against sickness. Medical writers from the Roman period, such as Celsus and Galen, recommend that sick people visit the baths.[24] Thermo-mineral baths were held in highest esteem because their waters were more curative. Vitruvius mentions how hot springs had healing powers because of all their foreign substances and describes, using a few examples, how using these waters cured certain ailments.[25] This meant that Hammam Des Beni Guecha was a very important site for those seeking better health.

As physical exercise was another important part of developing a healthy body, it is not surprising to find a *palaestra* here as well. The typical bathing rooms, such as the *frigidarium* and *caldarium*, were located to the north of the court. This facility also possessed small (3 m by 3 m) rooms along the edge of the *palaestra*, which Thébert suggests were lodgings, because no other structures were located capable of providing the necessary accommodations.[26] It is also possible that they were massaging rooms, or rooms where doctors provided treatment or physicals.

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[21] Alquier (1929) p.292, M. Christofle, *Rapport sur les travaux de fouilles et consolidation effectués en 1927, 1928 et 1929, par le service des monument historiques de l'Algérie* (Alger, 1930 et 1933) p.103 and Berthier (1962-1965) p.11, all assumed that there was a peristyle around the court. It is shown in Chapter Three that North African *palaestrae* were typically positioned in the north, northeast or east area of baths in order to provide shade for exercisers.
[22] See discussion on position of *palaestrae* in North African baths in Chapter Three.
[23] E. Vallet, « Découverte d'un établissement Thermal à Fedj M'Zala » *RSC* 55 (1923-1924) pp.198-199.
[24] Examples include Celsus, *De Medicina*.1.2; 1.3.4-5 and 2.17-2-10, as well as Galen, *De Sand. Tuend.* (6.1-452 Kühn): taken from Fagan (1999) p.86, n.6.
[25] Vitruvius, *De Architectura* 8.3.4.

Organization of the gazetteer of North African *palaestrae*

The remainder of this appendix will present a case study of the *palaestrae* present in North Africa. As in Italy, *palaestrae* in North Africa were always attached to baths. Even though there are many baths in North Africa, not all of them possess a *palaestra*. Therefore only those baths that had a *palaestra* or were connected to a *palaestra* in some manner, such as the Summer Baths at Thuburbo Maius, will be included. The list is organized alphabetically according to the ancient name of the city where the baths and *palaestra* reside. Where the ancient name of the city is unknown the modern name is used instead and inserted alphabetically. The ancient name of each site will be used throughout the thesis, except where the ancient name is unknown. The modern name of Karthago, Carthage, will also be used instead, as it is much more commonly used than the ancient name.

After identifying each *palaestra*, I will examine each under six different headings. The first section will deal with the location of the *palaestra*. This will include where in the city the baths were located, the size of the baths, the type of building techniques and materials used for their construction and their current state of preservation. Finally any other entertainment structures in the city will be identified and located in relation to the *palaestra*. The second section will be a detailed description of the *palaestra*. This will include measurements, materials used, architectural details and a description of its appearance. Any rooms connected to the *palaestra* will also be identified and briefly described. The third section will look at any artwork found in the *palaestra*, including but not limited to, sculptures and mosaics. Maps of the cities, plans of the baths and *palaestrae* are included, while inscriptions and the descriptions of artwork will be found in the following appendices.

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[26] Thébert (2003) p.204. There is no evidence to support or refute this idea.

The fourth section will deal with the date of the bath and its *palaestra*. The fifth section will be an excavation bibliography of the *palaestra*. This will deal with the original excavation reports and any study mentioning that *palaestra*. The bibliography will be arranged beginning with the earliest date, rather than being arranged alphabetically. It will not be a complete list, as there may be those who discuss the bath, but not the *palaestra* itself. The last section will discuss any ancient written sources mentioning the baths or the *palaestra*. This section will also include any relevant inscriptions about the *palaestra* or mentioning any physical exercises that occurred in the baths.

1. Bulla Regia (Jendouba): The Memmian Baths

1) Location/Urban context of *palaestra*

The Memmian Baths at Bulla Regia (Jendouba) are located in the south of Bulla Regia, almost where the city ends and the plain begins (Figure A3.1.1). The baths form a rectangle, measuring 60 m north to south and 48 m east to west and were constructed using the *opus africanum* technique. The *palaestra* was hypothesized to be at the west end, outside of the main bathing rooms. At the north end of the baths there are steps leading up 2.4 m to a street.[27] Moving east along this same street, approximately 200 m, one encounters the theatre. Bulla Regia also possesses an amphitheatre located to the northeast of the city.

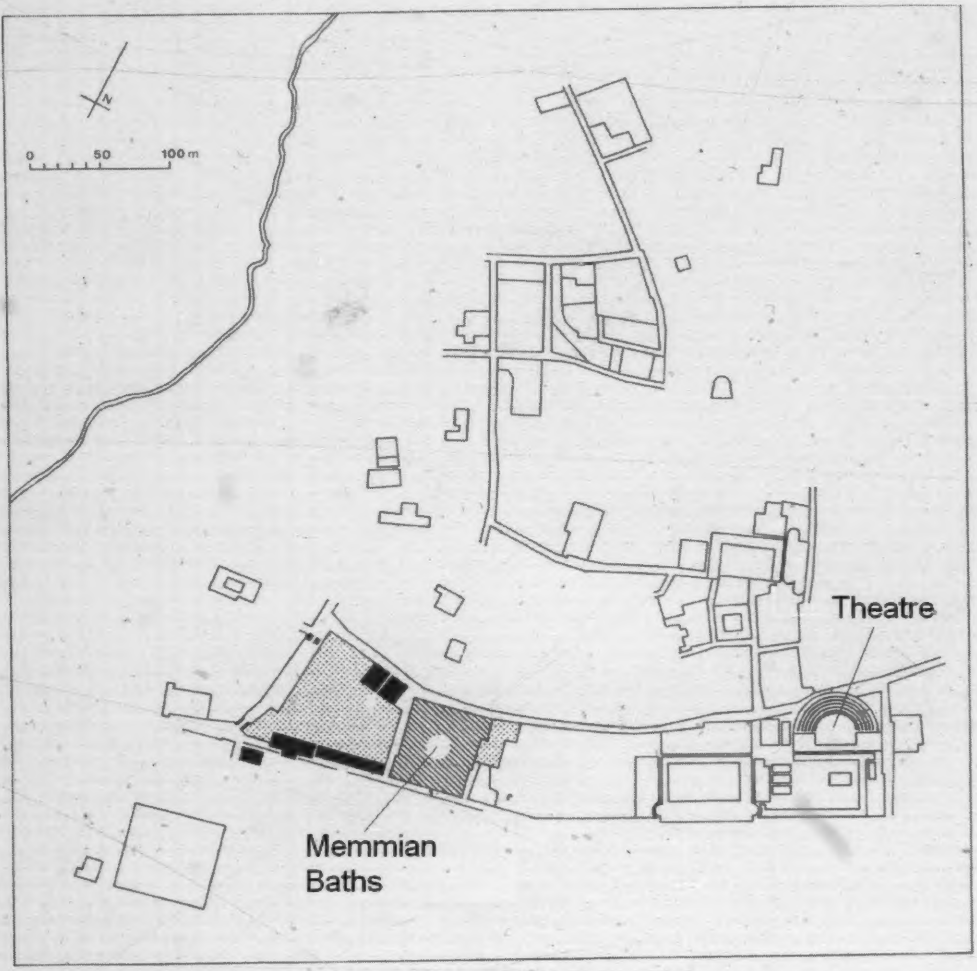

Figure A3.1.1

2) Description of *palaestra*

H. Broise and Y. Thébert believe that there was a *palaestra* on the west side of the baths (Figure A3.1.2, A3.1.3 & A3.1.4). There was a large open space here and the presence of many doors from the baths leading into this area suggests these two were connected. A door in the middle of this side led into what is believed to be a covered hall. A door at the south end of this side led to a corridor, which in turn continued east into a warm room (*tepidarium*), north into a service area (?), and south into either a service area or latrine (Figure A3.1.2).[28] Despite the fact that there was open space adjacent to the west side of the Memmian Baths, the authors admit that there is not enough evidence to conclusively support the supposition that the area was a *palaestra*.[29]

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[27] H. Broise & Y. Thébert, *Recherces archéologiques Franco-Tunisiennes à Bulla Regia : II. Les Architectures, 1. Les Thermes Memmiens*, vol.2, pt.1 (Rome, 1993) p.1 and Yegül (1992) p.217.

If a *palaestra* was originally a part of the Memmian Baths, it was demolished in the 4th century AD, around 360, when some new rooms were added to the west side (Figures A3.1.3 & A3.1.4). The corridor at the south end of the west wall was extended westward and a semi-circular latrine was constructed. To the north a long hall, which Broise and Thébert term a cryptoporticus, was added. The remaining space of the *palaestra* was also utilized, since a walkway, not associated with the baths, was uncovered.[30] The result of all these alterations meant that after AD 360 there was no *palaestra* at the Memmian Baths.

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[28] See Broise & Thébert (1993) for the descriptions of these rooms.

[29] Broise & Thébert (1993) pp.1 & 408. Further excavation in this area may help determine whether or not there was a *palaestra*: Broise & Thébert (1993) p.422.

[30] Broise & Thébert (1993) p.92.

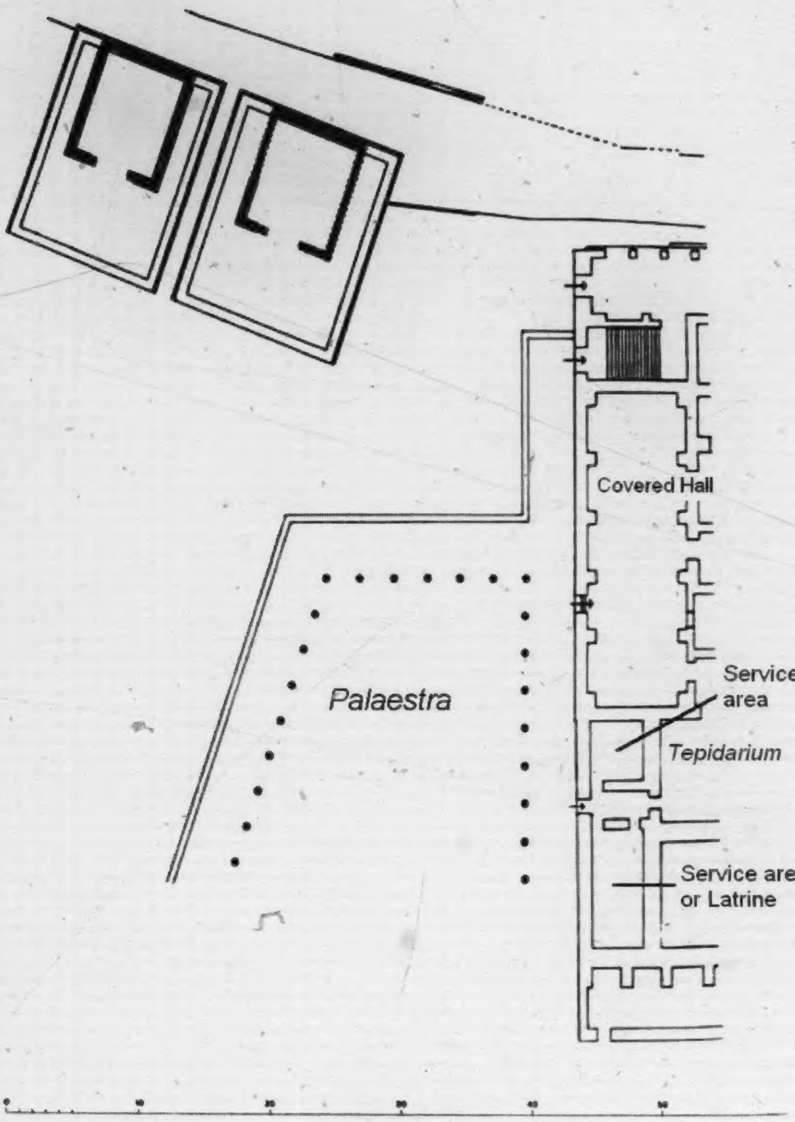
Covered Hall
Service area
Palaestra
Tepidarium
Service area or Latrine

Figure A3.1.2

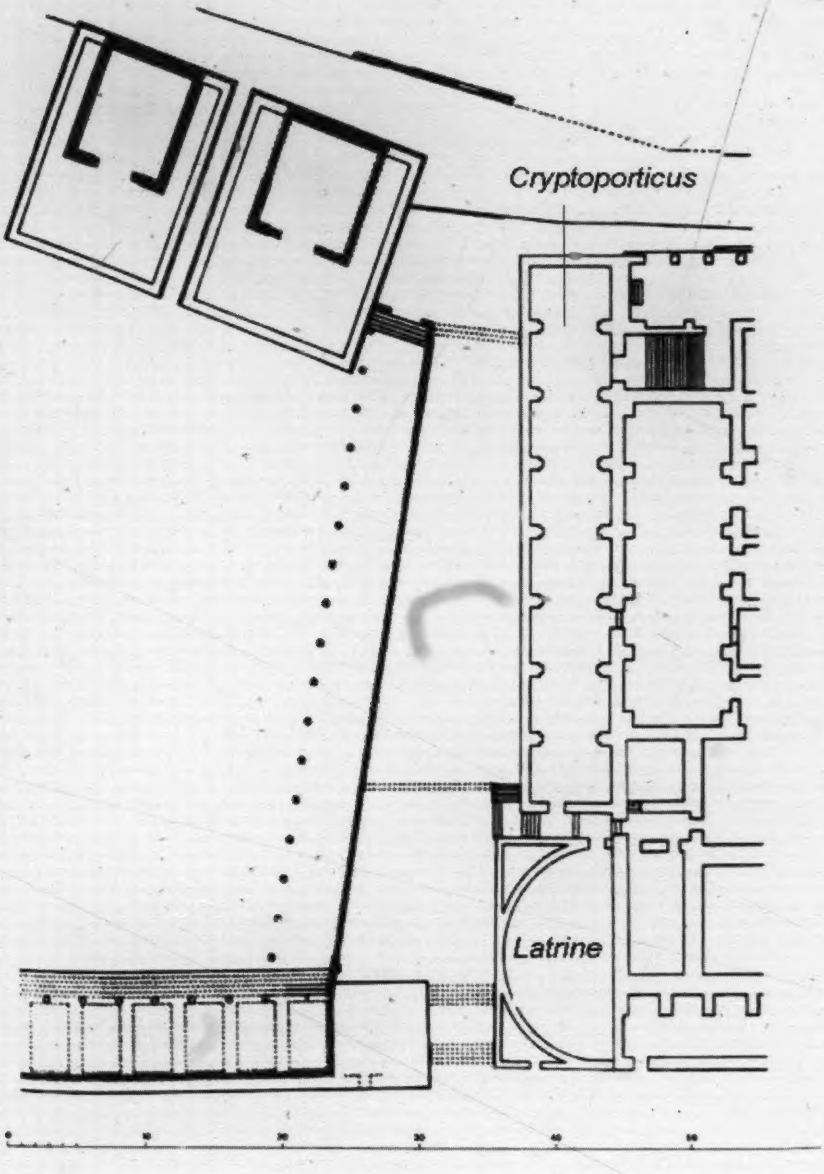

Figure A3.1.3

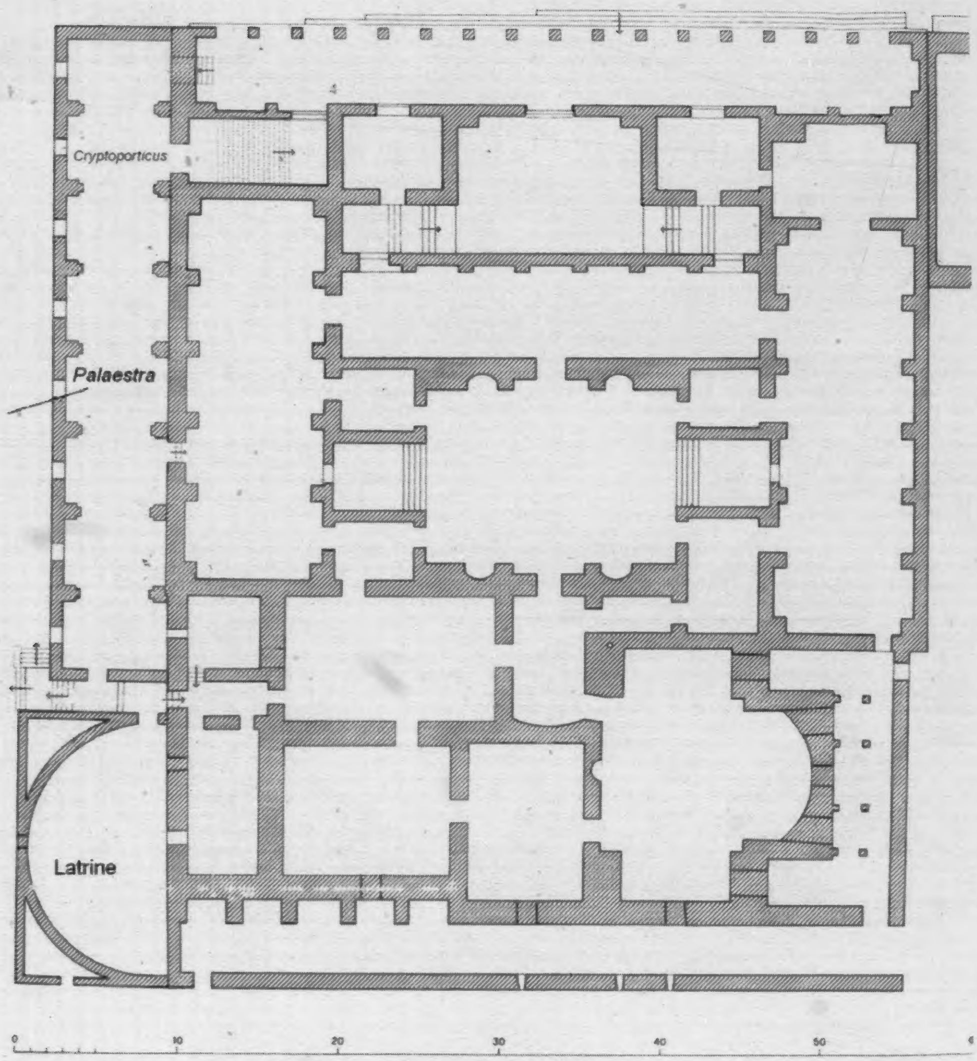

Figure A3.1.4

3) Artworks associated with the *palaestra*

Throughout the Memmian Baths there were decorations that H. Broise and Y. Thébert suggest could be the insignia of private clubs.[31] There were also statues and mosaics within the baths.[32] However, no artworks were found specifically linked to the *palaestra*.

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[31] Broise & Thébert (1993) pp.415-419. For more information concerning the insignia of clubs in North Africa see also M.A. Beschaouch, "Nouvelles observations sur les sodalités Africaines" *CRAI* (1985) pp.453-75, *ibid.*, "Une sodalité Africaine méconnue: Les Perexii" *CRAI* (1979) pp.410-20, *ibid.*, "Nouvelles Recherches sur les sodalités de l'Afrique romaine" *CRAI* (1977) pp.486-503 and Y.

4) Date of *palaestra*

The Memmian Baths at Bulla Regia are dated between AD 220 and 240.[33] This date is based on the inscription naming Julia Memmia.[34] Fragments of pottery were also uncovered attributing the construction of the monument to the end of the Severan period.[35] Around AD 360 the baths were altered and the *palaestra* built over.[36] Finds from the baths indicate that the baths were used at least until the middle of the 5th century AD.

5) Excavation Bibliography

Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.189-190
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.90-91
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.217
Broise, H., & Thébert, Y., *Recherces archéologiques Franco-Tunisiennes à Bulla Regia : II. Les Architectures, 1. Les Thermes Memmiens*, vol.2, pt.1 (Rome, 1993)
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.133-134

Thébert, « Les sodalités dans les thermes d'Afrique du Nord », in *Les thermes romains. Actes de la table ronde de Rome*, 11-12 nov. 1988, collection de l'EFR, 142 (Rome, 1991) pp.193-204.

[32] See Broise & Thébert (1993) volumes IV & V for a description of the artworks found inside the baths.

[33] Thébert (2003) p.133.

[34] *ILAfr*.454 = *AE*, 1921.45. See # 1, in the Bulla Regia part of section one in Appendix Four.

[35] Thébert (2003) p.133.

[36] Thébert (2003) p.134. See above for a description of the changes to the suspected *palaestra*.

6) Textual evidence

Many inscriptions were found in the baths.[37] However, no inscriptions were found in the area believed to be the *palaestra*, nor are there any inscriptions which mention a *palaestra* at the Memmian Baths.

2. Cuicul (Djemila): Large South Baths

1) Location/Urban context of *palaestra*

The ancient city of Cuicul, located 83 km to the west of Cirta and 38 km northeast of Sitifis, has been extensively excavated since the 18th century.[38] The Large South Baths were first discovered around 1916, in the south of Cuicul and are 100 m south of the new forum and 100 m northwest of the Christian basilica (Figure A3.2.1). They lie between the *Cardo Maximus* and the large street. There is a significant incline of 17 steps from the bottom of the street to the entrance of the baths. There is a platform at the front of the baths that is lined with 13 columns. The baths cover approximately 3000 m² and were constructed using *opus vittatum* and *opus africanum*. Except for a few rooms and the *palaestra* in the north they are for the most part symmetrical.[39] Thébert suggests that these baths were initially symmetrical with a second *palaestra* at the south end of the baths, but subsequent alterations changed this area.[40] Cuicul also had a theatre about 150 m northeast of these baths.

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[37] For a list of the inscriptions uncovered at these baths see A. Beschaouch, *Recherces archéologiques Franco-Tunisiennes à Bulla Regia : III. Épigraphie, 1. Les Thermes Memmiens*, vol.3, pt.I (Rome, 1993).

[38] C. Lepelley, *Les Cités de l'Afrique Romaine au Bas-Empire, Tome II : Notice d'histoire municipale* (Paris, 1981) p.402.

[39] A. Ballu, « Ruines de Djemila (antique Cuicul) » *RAfr* 62 (1921) p.255. Other measurements for the total area of these baths include L. Leschi, *Djemila Cuicul de Numidie* (Alger, 1938) p.28: 2600 m², and P. Romanelli, *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) p.181: 2500 m².

[40] Thébert (2003) p.194. There is no evidence to suggest that this was ever the case.

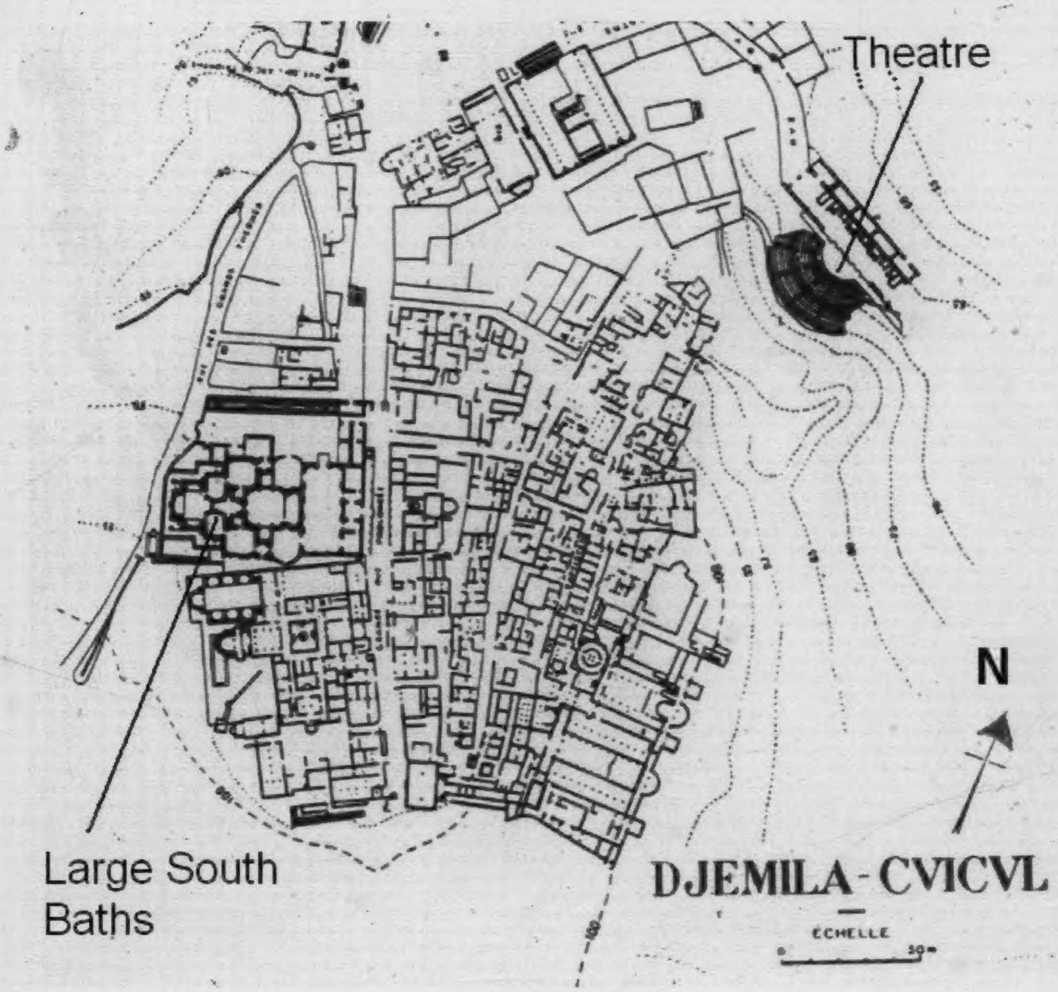

Figure A3.2.1

2) Description of *palaestra*

The main entrance into the baths was at the east end and one entered into a small vestibule (Figure A3.2.2). To the south of this room were other small vestibules and to the north there was another small room and then a latrine with 24 seats. Moving westwards there was a very large covered rectangular room measuring 31.20 m by 12.83

m with niches along the walls and floors paved in marble. Many believe this room was used for exercising.[41]

At the north end of this room was a door 2.67 m wide that provided access into a large paved court. This was the *palaestra* and its width ranged from 12.25 m at the west side, to 8.1 m at the centre and 16.40 m at the east end. The *palaestra* also ran along almost the entire length of the north side giving a total area of around 700 m^2. On the west side of the *palaestra* there is evidence of a remaining colonnade and Ballu believed that there was a covered promenade around the edges.[42] Today these galleries have disappeared and all that remains is a terrace. There is a door at the west end of this area with a staircase leading underneath the baths to some boiler rooms. There was also a passage going to some reservoirs under the porticoes of the court .[43]

Adjoining the *palaestra* was a change room (*apodyterium*) measuring 8.6 m by 10.10 m with semi-circular ends, marble decorated walls and floors paved with mosaic. In the northwest corner of this same room was another door leading into a small room, which in turn led north to a room measuring 7.15 m by 9.25 m and identified as an oiling room (*elaeothesium*).[44] This room in turn connected to heated rooms in the west, one of which may have opened into the *palaestra*.[45]

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[41] Y. Allais, *Djemila* (Paris, 1938) p.54, L. Leschi, *Djemila, antique Cuicul* (Alger, 1950) p.32, and Thébert (2003) p.195. It is also frequently referred to as a gymnasium.
[42] A. Ballu, *BAC* (1919) p.94.
[43] Allais (1938) p.56 and Leschi (1938) p.28.
[44] Ballu (1921) p.259 and Romanelli (1970) p.181. There is no indication as to why this was identified as the oiling room.
[45] The plans of the Large South Baths indicate that there was a door leading from one of these heated rooms into the *palaestra*.

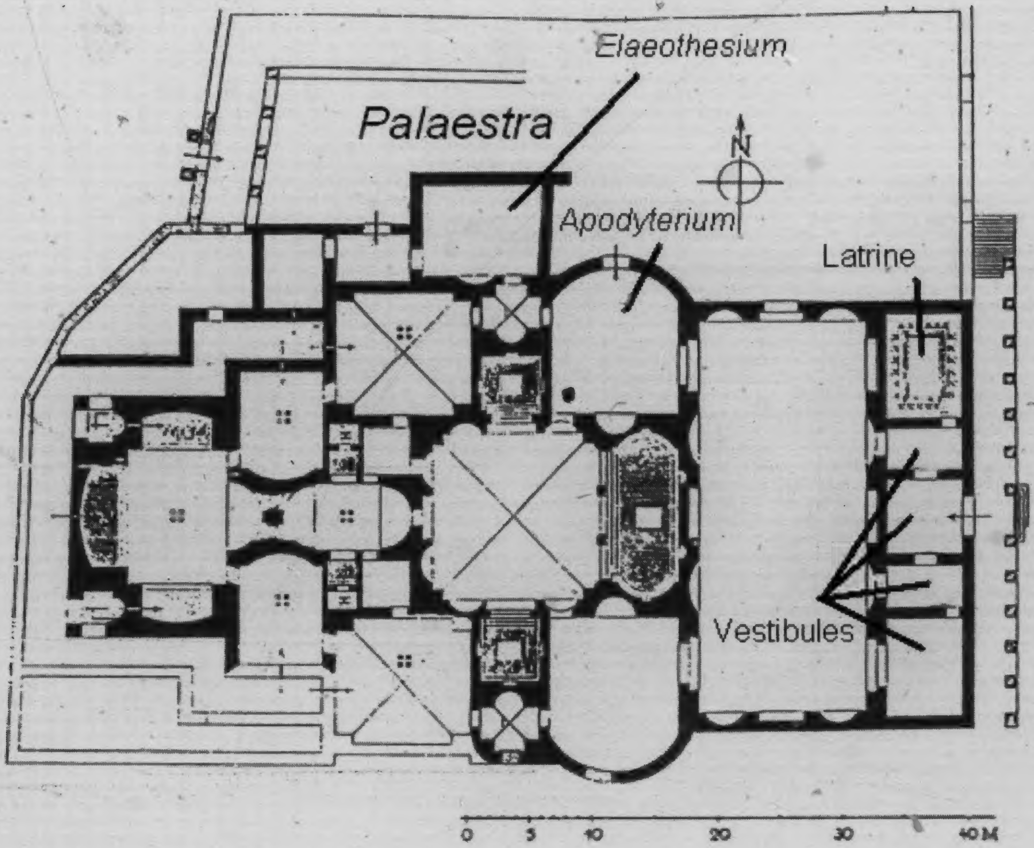

Figure A3.2.2

3) Artworks associated with the *palaestra*

There were no artworks associated with the *palaestra* in the Large South Baths at Cuicul. Although the base of a pedestal was found in the area, no statues were associated with it. Ballu mentions the discovery of Aesclepius and Hygia statues in the baths but not where they were found.[46] One would surmise they were perhaps from the *frigidarium* or hall where there were niches for sculptures.

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[46] Ballu (1921) p.261.

4) Date of *palaestra*

Two inscriptions found in and around the baths allow us to date the structure to either AD 183 or the beginning of 184.[47] It is assumed that the *palaestra* was a part of this initial construction. However Y. Thébert argues that the southernmost part of the *palaestra* was demolished sometime during the bath's history. Some of the bath's pavements were restored during the 4th century implying that they were used at least until this period.[48]

5) Excavation Bibliography

Ballu, A., *BAC* (1919) pp.87-98 & pp.164-166
RAfr (1920) pp.319-323
JO (1920) pp.37-41
Ballu, A., « Ruines de Djemila (antique Cuicul) » *RAfr* 62 (1921) pp.255-261
Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.197-198
Christofle, M., *Rapport sur les travaux de fouilles et consolidation effectués en 1927, 1928 et 1929, par le service des monument historiques de l'Algérie* (Alger, 1930 et 1933) pp.44-47
Leschi, L., *BAC* (1934-35) pp.355-357
Allais, Y., *Djemila* (Paris, 1938) pp.54-56
Leschi, L., *Djemila Cuicul de Numidie* (Alger, 1938) pp.28-29
Leschi, L., *Djemila, antique Cuicul* (Alger, 1950) pp.32-35
Fevrier, P-A., *Djemila* (Alger, 1968) pp.67-71
Romanelli, P., *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) pp.180-182
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.87-90
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.210-212
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.194-195

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[47] *AE*, 1920.16 (# 1) and *AE*, 1935.45 = L. Leschi, *BAC* (1934-35) pp.355-356 (# 2). See #'s 1 & 2 in the Cuicul part of section one in Appendix Four.
[48] Thébert (2003) p.195.

6) Textual evidence

There are no ancient literary sources mentioning these baths. Besides the two inscriptions giving us the date for the construction of these baths, there was other epigraphic evidence found throughout the structure, including one inscription from the *palaestra*. This was a dedicatory inscription found on two sides of the base of a pedestal.[49]

3. Gigthis (Bou Ghrara): The *Palaestra* Baths/West Baths

1) Location/Urban context of *palaestra*

The ancient city of Gigthis is located in southern Tunisia near the sea of Bou-Ghrara. The *Palaestra* Baths are located in the western part of Gigthis and are 200 m west of the forum (Figure A3.3.1). They are orientated East-North-East to South-South-West and forms a rectangle of 104 m by 66 m. Romanelli estimates that the entire structure is around 6000 m².[50] The foundations of the walls surrounding the baths are the only part of the *palaestra* that remains, and they measure 1.3 m deep and 1.2 m broad.[51] The west half contains the bathing rooms, accounting for only 37 m by 66 m of the entire complex. On the east side of the structure is a circular arena, which is believed to be the *palaestra*. There are no other known entertainment facilities in Gigthis.

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[49] See above for the inscriptions that give the date of the baths. See Thébert (2003) pp.505-506, and Ballu *BAC* (1919) pp.94-97 for some of the other inscriptions found within the baths. See Ballu *BAC* (1919) pp.94-95 for the inscription found in the *palaestra*. See also # 3 in the Cuicul part of section one in Appendix Four.

[50] Romanelli (1970) p.184.

[51] L.A. Constans, *Gigthis, Étude d'histoire et d'archéologie* (Paris, 1916) p.78.

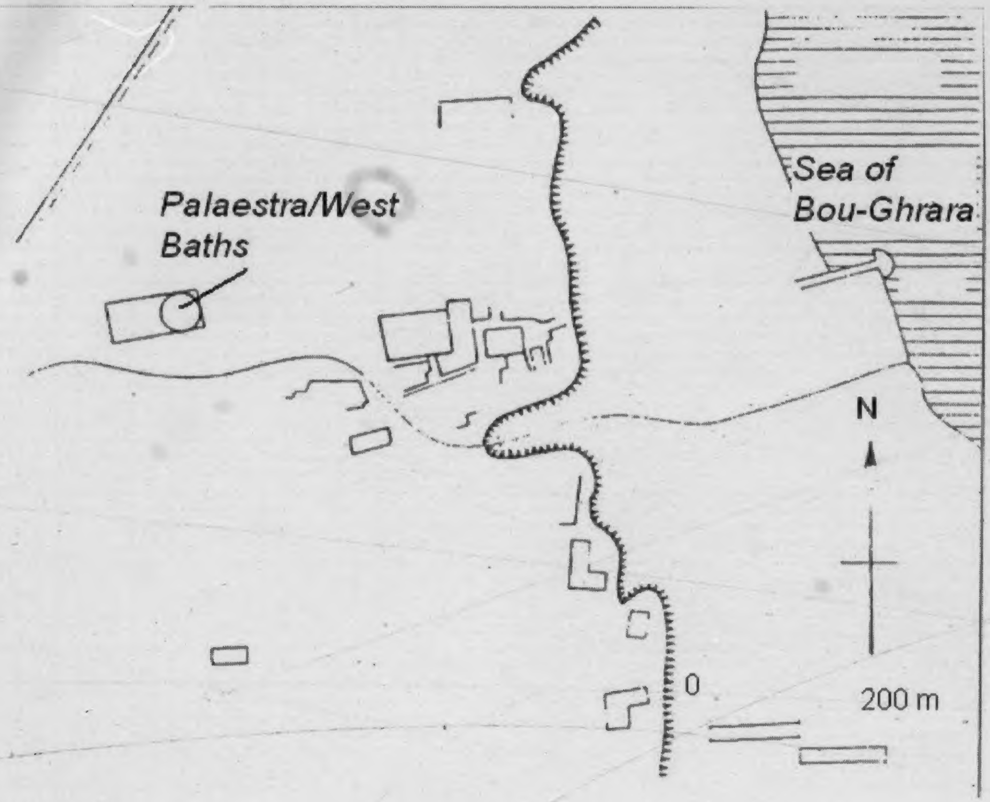

Figure A3.3.1

2) Description of the *palaestra*

The *Palaestra* Baths at Gigthis have not been fully excavated (Figure A3.3.2). The *palaestra* is circular and occupies nearly two thirds of the entire bath complex.[52] The *palaestra* is located on the east side of the baths and each side measures 66 m. Due to the poor preservation of the site, L.A. Constans conjectured that the 13 m gap in the circular wall on the east side of the *palaestra* was the principal entrance from outside of the structure.[53] Other than this the only access into the arena is located on the west side, connecting to the rest of the baths. The floor of the arena was filled with sand and the abundance of collapsed building materials on top of the arena floor suggests that a covered circular promenade was located around the *palaestra*.[54] However Thébert rightly points out that there is no firm evidence to support this idea.[55]

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[52] Thébert (2003) p.138. Romanelli (1970) p.184 estimates the total area at around 4000 m².

[53] Constans (1916) p.79. D. Krencker, E. Krüger, H. Lehmann, and H. Wachtler, *Die Trierer Kaiserthermen* (Augsbourg, 1929) p.188, fig.243 (Hereafter Krencker (1929)) also believes that this was the principal entrance into the *palaestra* baths.

Adjoining the *palaestra* are three semi-circular *exedrae* located in the northwest, southwest and southeast corners. Constans suggests that the lack of an exedra in the northeast corner was because it was always exposed to the sun.[56] D. Krencker however hypothesizes that there was a fourth exedra in the northeast corner of the *palaestra* and included it in his plan of this bath.[57]

Again due to the poor preservation of the site, the entrance for each existing exedra was inconclusive, but all three were paved with concrete. The southeast exedra is the largest of the three and possesses a canal running along the wall, 0.6 m wide and an average of 1.2 m deep, suggesting that the room was a latrine. This canal connects to the large central area and appears to go around the entire *palaestra*, as parts of it were unearthed on the west wall. Here it joined another canal, which carried water out from all of the pools inside of the bath. It is unclear where the water was taken. The water supplying the latrine came from a well 75 m south of the baths. No canals are present in the other two *exedrae* and Constans suggests that they were possibly used for rest and conversation.[58] Bordering the north side of the *palaestra* is an unidentified small room measuring 2.6 m by 2.2 m with a floor paved with concrete.[59]

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[54] Constans (1916) p.80. Krencker (1929) also includes a circular row of columns on his site plan suggesting that he believed in the possibility of a covered walkway.
[55] Thébert (2003) p.138. Krencker (1929) p.187 notes that there is also no evidence to support the existence of an upper level at this bath.
[56] Constans (1916) p.79.
[57] Krencker (1929) p.188, fig.243. Yegül (1992) p.221 also includes this fourth exedra in his figure 251.

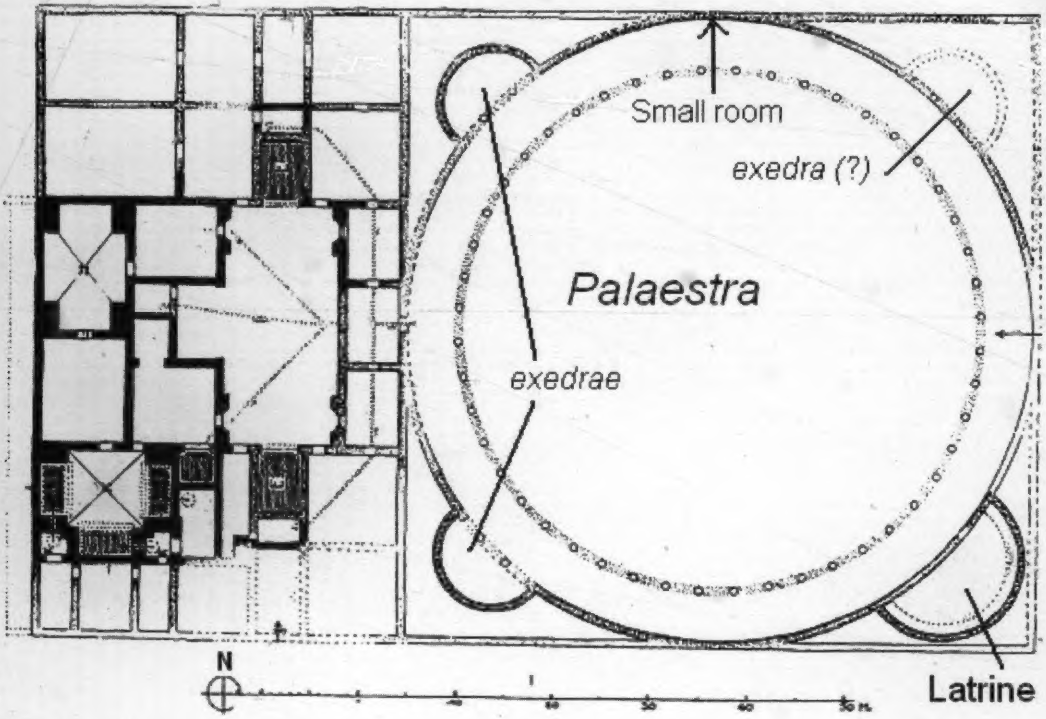

Figure A3.3.2

3) Artworks associated with the *palaestra*

None.[60]

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[58] Constans (1916) p.79.

[59] Constans (1916) p.80. Although the function of this space is unclear Constans has suggested that perhaps it was a box for the judge residing over the games occurring in the *palaestra*. This is however entirely conjecture. The presence of this small room is absent on the site plan drawn by Krencker (1929) p.188, fig.243, suggesting that he did not believe this was part of the bath complex.

[60] Constans (1919) p.86, ft.2: Only the fragment of a terracotta stove decorated with the figure of an unidentified woman and two lamps, one showing Hercules delivering Hesione and the other showing Mercury over a ram were found at the site. Where they were found is not mentioned. There are two athletic mosaics from Gigthis, but not from the *palaestra* bath. They come from the *tepidarium* in the central baths. There are two scenes of wrestlers accompanying prizes (Figures 1.8 & 1.9). For information on the central baths see Constans (1916) pp.73-78 and Thébert (2003) pp.139-140.

4) Date of *palaestra*

The date of these baths is unknown but P. Romanelli suggests a 2nd century AD date. There is nothing to support or refute this hypothesis however.[61]

5) Excavation Bibliography

Constans, L.A., *Gigthis, Étude d'histoire et d'archéologie* (Paris, 1916) esp.pp.78-86
Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.187-189
Romanelli, P., *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) p.184
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.90-91
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.221-222
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.137-139

6) Textual evidence

None.

4. Hippo Regius (Annaba): Large North Baths

1) Location/Urban context of *palaestra*

The Large North Baths at Hippo Regius (Annaba) are located on a flat plain at the north of the city (Figure A3.4.1). They were constructed using both the *opus incertum* and *opus testaceum* techniques. Not including the two-suspected *palaestrae*, the baths cover an area of around 2000 m². The structure itself measures 75 m by 60 m.[62] The area around the baths is mostly unexcavated but it is possible to speculate what was adjacent to the structure. There was a portico on the north, west and south sides of the baths. To the north was also a street separating the baths from some houses and to the south was a large marble paved area. More excavation is needed to determine what these areas were, but they all appear to have been streets.[63] Along the southeast side, which is a part of the baths, is a large space identified as a *palaestra*. Thébert suggests that the large space in the southwest corner could be another *palaestra*.[64] There is also a theatre at the west end of Hippo Regius.

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[61] Romanelli (1970) p.184.
[62] The inclusion of the two possible *palaestrae* increases the total area to around 4500 m².

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[63] Yegül (1992) p.232.

[64] Y. Thébert, « Problèmes de circulation dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) p.146 (Hereafter Thébert *Circulation* (1991)) and Thébert (2003) p.207. J. Lassus « L'archéologie algérienne en 1957 » *Libyca* 6 (1958) p.258 also notes the possibility of this area being a *palaestra*. It is a large open space but other than that it does not have any of the features usually seen as accompanying a *palaestra*. This area is beside the heated rooms of the baths, similar to that of the Hadrianic Baths at Lepcis. Perhaps the area was used to store wood for the furnaces?

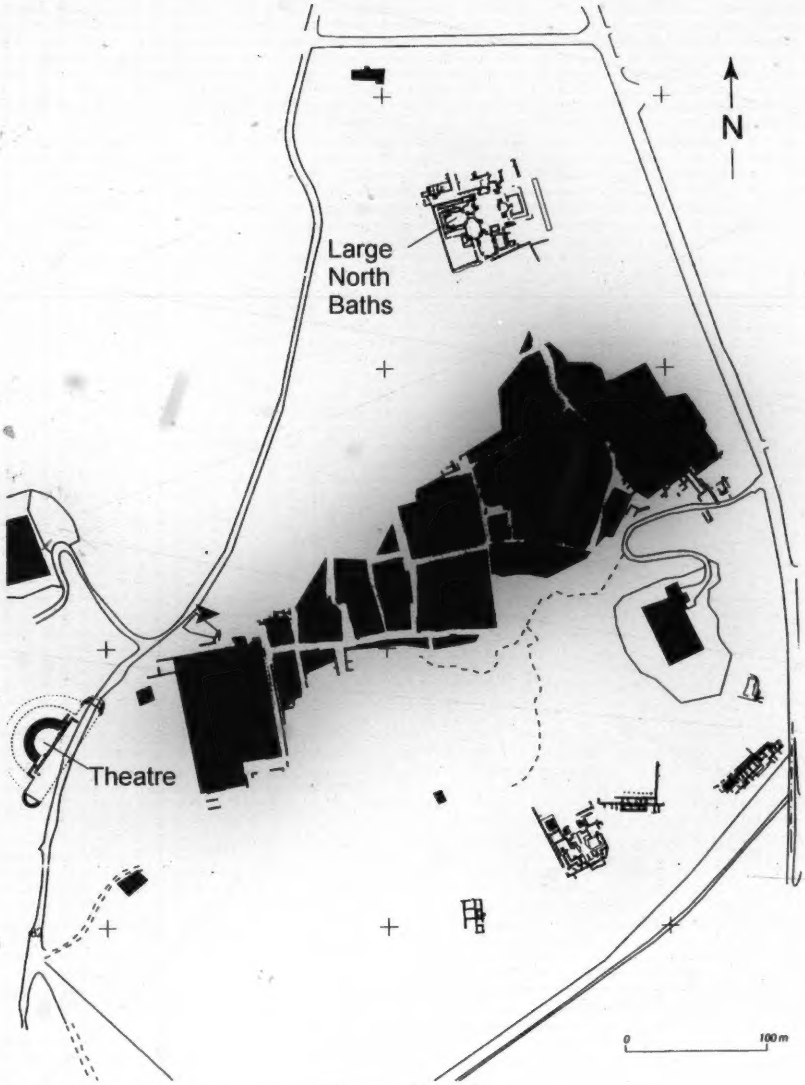

Figure A3.4.1

2) Description of *palaestra*

Other than being a large open space in the southwest corner there is no evidence to suggest that this area ever contained a *palaestra* (Figure A3.4.2).[65] The large space in the southeast corner however is considered in all likelihood to be a *palaestra*, as there is evidence for a portico and a possible covered corridor (*cryptoporticus*).[66] Dahmani notes that the area was paved with concrete and had some marble slabs covering portions of the area. He also suggests that the colonnade here may have been an extension of the peristyle that was just outside of the building.[67] The area appears to be open to the sky and immediately north are the remains of an open-air pool measuring 14 m by 8 m. The pool had three straight sides with the fourth west side following the contours of the *frigidarium*. The three straight sides all had three steps leading down into the pool, which was paved in marble.[68] A wall, possibly of a later date, slightly juts out into this area from the south.[69]

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[65] E. Marec, « Les Thermes d'Hippone » in *Actes du 79 congres national des societes savantes, Alger 1954* (Paris, 1957) p.116 suggests that this area could be a *palaestra* or gymnasium but admits further excavation is needed in order to confirm this.

The *frigidarium*, which measured 30 m by 15 m and possessed three small cold pools were entered from the northwest. This was the most lavishly decorated room, where most of the statues and mosaics were uncovered. South of the *frigidarium* was a room that had a large heated pool measuring 10 m by 6.5 m and was also accessible to the *palaestra*. West of these areas were where all of the heated rooms were located.

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[66] Yegül (1992) p.232, Thébert (2003) p.207 and X. Delestre, « Les Thermes » in Delestre, X., (ed), *Hippone*, (Aix-en-Provence, 2005) p.118. Not much is given on the remains of this area, such as the description of the portico, except that it is present. Based on the plan of the baths the *palaestra* area measures approximately 40 m by 20 m giving a total area of 800 m^2.

[67] S. Dahmani, *Hippo Regius* (Alger, 1973) p.63. E. Marec, *Hippone la Royale*, 2nd ed. (Alger, 1954) p.91 also notes the presence of a concrete floor in the southeast corner.

[68] J. Lassus, « L'archéologie algérienne en 1955 » *Libyca* 4 (1956) p.184.

[69] M. Leglay, « L'archéologie algérienne en 1954 » *Libyca* 3 (1954) p.200. It is unclear what purpose or function this wall played.

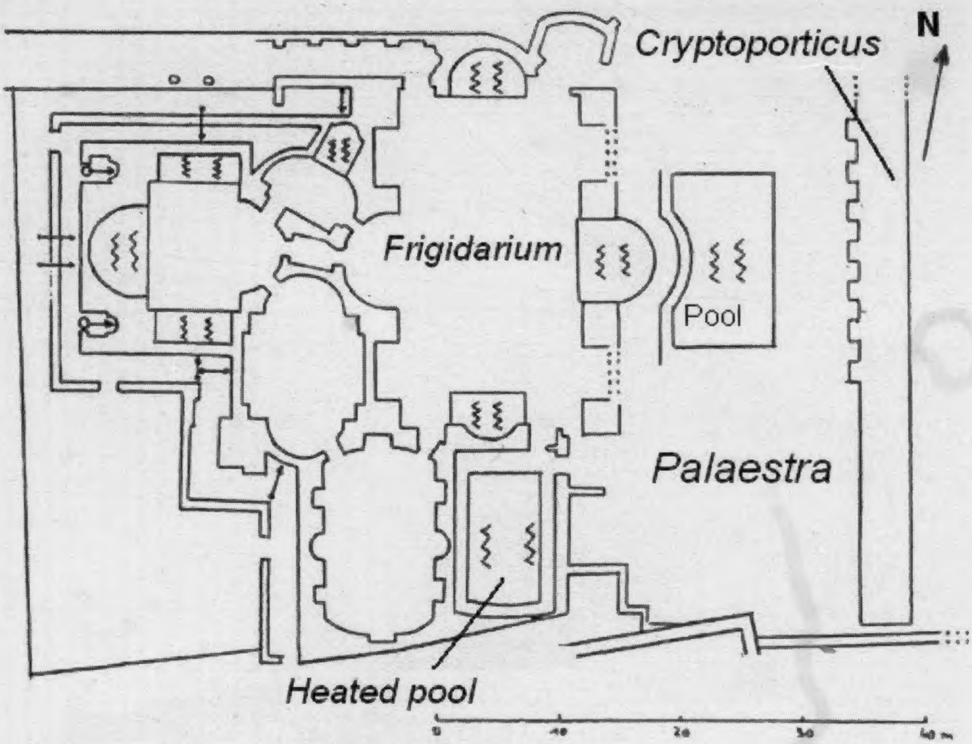

Figure A3.4.2

3) Artworks associated with the *palaestra*

None. Numerous sculptures, including those of Aphrodite and Hercules, as well as mosaics were uncovered in the baths.[70]

4) Date of *palaestra*

The Large North Baths are dated between AD 211 and 217 by an inscription found in a small room just west of the *frigidarium*.[71] It is a dedication to Septimius Severus by his son Caracalla. Brick stamps found in some of the heated rooms also carried the name of Claudius Felix, from Salerno. This same mark was found on bricks used in the construction of the baths of Caracalla in Rome.[72] There was also an inscription found on the base of four statues dating to the first half of the 3rd century AD.[73] There is other evidence to suggest that these baths were restored in a later period. The marble floors in the heated rooms were restored, as well as parts of the *frigidarium* and *caldarium*.[74]

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[70] See Marec (1954) pp.97-98, E. Marec « Note sur l'Aphrodite des grands thermes d'Hippone et la tête d'aphrodite trouvée à Duzerville » *Libyca* 7 (1959) pp.15-25 and Delestre (2005) p.119 for a discussion on the sculptures, and Marec (1954) and Dahmani (1973) for some discussion on the mosaics.

[71] E. Marec, *Bull. Acad. Hip.* (1925-1927) p.17. See # 1, in the *Hippo Regius* part of section one in Appendix Four.

5) Excavation Bibliography

Marec, E., *Bull. Acad. Hipp.* 35 (1922-24) pp.31-39, 189
______ « Les thermes de Septime Sévère » *Bull. Acad. Hipp.* 36 (1925-27) pp.11-23 & 30-34
Christofle, M., *Rapport sur les travaux de fouilles et consolidation effectués en 1927, 1928 et 1929, par le service des monument historiques de l'Algérie* (Alger, 1930 et 1933) pp.98-99
Leglay, M., « L'archéologie algérienne en 1953 » *Libyca* 2 (1953) pp.273-289, esp.280
______ « Rapport sur l'activité archéologique en Algérie au cours des quatre dernières années (1950-1953) » *BAC* (1954) pp.183-203, esp.187-189
______ « L'archéologie algérienne en 1954 » *Libyca* 3 (1954) pp.183-206, esp.200
Marec, E., *Hippone la Royale*, 2nd ed. (Alger, 1954) esp. pp.89-98
Lassus, J., « L'archéologie algérienne en 1955 » *Libyca* 4 (1956) pp.161-189, esp. 184-185
Marec, E., « Inscriptions recueillies à Hippone dans les thermes du Nord et du Sud » *Libyca* 4 (1956) pp.291-305
______ « Les Thermes d'Hippone » in *Actes du 79 congres national des societes savantes, Alger 1954* (Paris, 1957) pp.111-122
Lassus, J., « L'archéologie algérienne en 1957 » *Libyca* 6 (1958) pp.197-265, esp. 228-232
______ « L'archéologie algérienne en 1958 » *Libyca* 7 (1959) pp.223-346, esp.307-310
Marec, E., « Note sur l'Aphrodite des grands thermes d'Hippone et la tête d'aphrodite trouvée à Duzerville » *Libyca* 7 (1959) pp.15-25
Lassus, J., « L'archéologie algérienne en 1959 » *Libyca* 8 (1960) pp.1-109, esp.98-101
Dahmani, S., *Hippo Regius* (Alger, 1973) pp.61-67
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.89-91

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[72] Yegül (1992) p.230, Thébert (2003) p.206 and Delestre (2005) p.119.
[73] *AÉ*, 1958.135. See Thébert (2003) pp.506-507 for brief discussion on this inscription.
[74] Thébert (2003) p.206.

Thébert, Y., « Problèmes de circulation dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) pp.146-147
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.230-232
Broise, H., & Thébert, Y., *Recherces archéologiques Franco-Tunisiennes à Bulla Regia : II. Les Architectures, 1. Les Thermes Memmiens*, vol.2, pt.1 (Rome, 1993)
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.206-208
Delestre, X., « Les Thermes » in Delestre, X., (ed), *Hippone*, (Aix-en-Provence, 2005) pp.117-120

6) Textual evidence

The city of Hippo Regius is often mentioned in the ancient literary sources, but only St. Augustine makes any mention of a bath.[75] He mentions the *Balnea Sossii*, but it is impossible to attribute this name to the Large North Baths. Except for this reference there are no other ancient literary sources mentioning a bath in Hippo Regius. There are no inscriptions from the *palaestra* or that mention the *palaestra*. A few inscriptions were found inside the baths, which help to date the structure but are of little relevance to this study.[76]

5. Iol-Caesarea (Cherchel): Large West Baths

1) Location/Urban context of *palaestra*

The Large West Baths at Iol-Caesarea, or just Caesarea, (Cherchel) are located at the north end of the city near the shore (Figure A3.5.1). They are symmetrical, built in the Imperial style and cover around 5500 m², not including the suspected *palaestra* to the east of the structure.[77] The baths are built using the *opus incertum* and *opus testaceum* techniques. Parts of the modern day city cover the baths, with the city prison situated at the south end and modern storerooms over the *palaestra* in the east.[78] The city of Caesarea had a theatre approximately 300 m to the southeast, an oblong amphitheatre at the east end and possibly a circus in the southwest end of the city.

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[75] Diodorus, 20.57.6, Livy, 29.3.7 & 32.14 and Caesar, *Bellum Africum* 96. St. Augustine, *Disputatio Primae Diei* Col.112.
[76] See above for the discussion on these inscriptions.
[77] Thébert (2003) p.192. Nielsen (1990) v.2, p.29 gives the total area of 7560 m², and thus she must include the *palaestra* in her measurement.

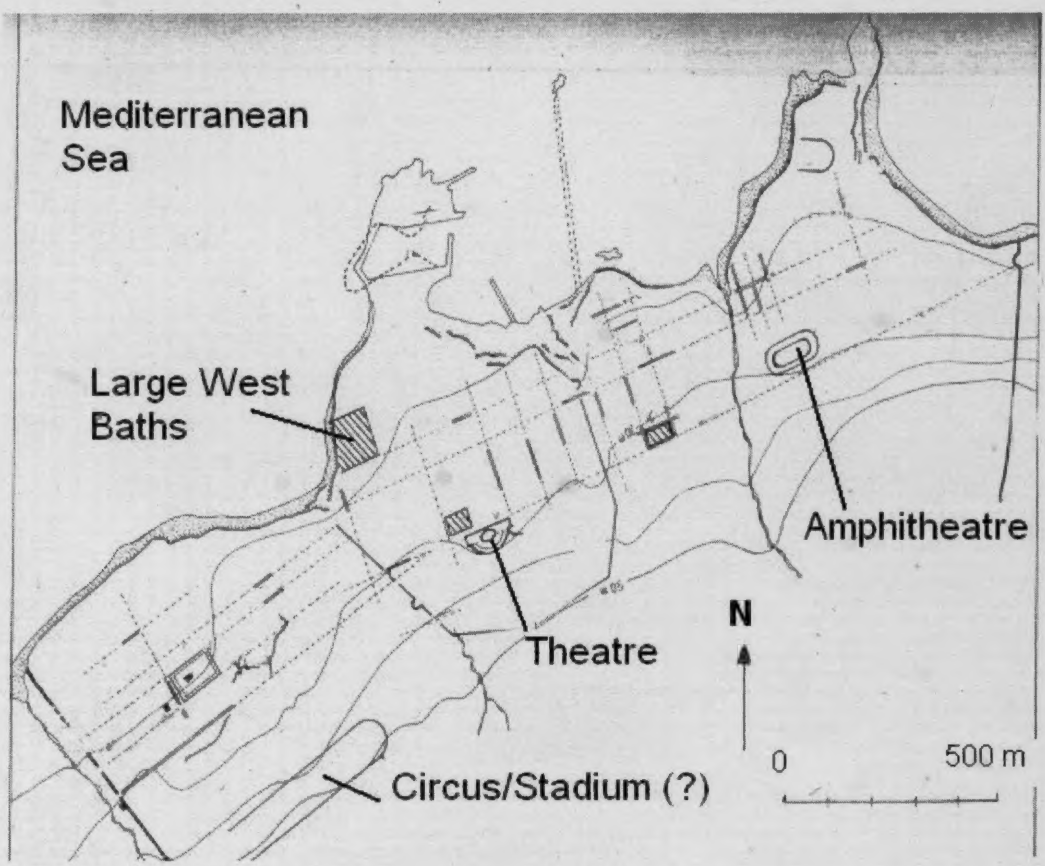

Figure A3.5.1

2) Description of *palaestra*

As the *palaestra* has not been uncovered there is very little evidence available for its description (Figure A3.5.2). The length of the *palaestra* measured at least 100 m but the width is unknown.[79] During Waille's excavations he unearthed a few 8 m granite columns at the east end of the baths. Waille and Gsell both believe that the 100 or so columns from the nearby 16th century mosque were taken from this area of the baths.[80] Waille mentions that in the 1840's the remains of a marble portico and green columns of diorite were found in this same area and the capitals were Ionic.[81] The sheer number of columns and the evidence of a portico suggest that the area was a *palaestra*.

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[78] S. Gsell, *Cherchel : Antique Iol-Caesarea* (Alger, 1952) p.110.

The east façade of the Large West Baths, like the *palaestra*, is not fully excavated. It appears however that there were various rooms running across this side with doors at the north and south ends leading into larger areas. Both areas measured 30 m by 14 m, were paved with mosaics and have been described as exercise areas.[82] In between these two areas is the *frigidarium* paved in onyx and measuring 23.1 m in length. It had two small pools, one in the north and the other in the south, and a larger pool to the east. This latter pool does not appear to have given access to the *palaestra*.[83] The heated rooms were located at the west end of the baths.

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[79] If one looks at other *palaestrae* from North Africa that is located in the same space of the baths we see that the width of these are about half of the total length. See for example the *palaestra* at the Camp Baths in Lambaesis and at Thysdrus. We can then estimate that the width of the *palaestra* at Caesarea was around 50 m making the total area of the *palaestra* approximately 5000 m^2.

[80] V. Waille *CRAI* (1887) p.233. See also Gsell (1952) p.112.

[81] V. Waille *CRAI* (1888) p.244 and Gsell (1952) p.112.

[82] V. Waille *CRAI* (1888) p.243 and Thébert (2003) p.192. Both call these exercise areas *gymnasia*. Thébert does admit that these areas are still not well known however.

[83] Krencker (1929) p.196 and Thébert (2003) p.192.

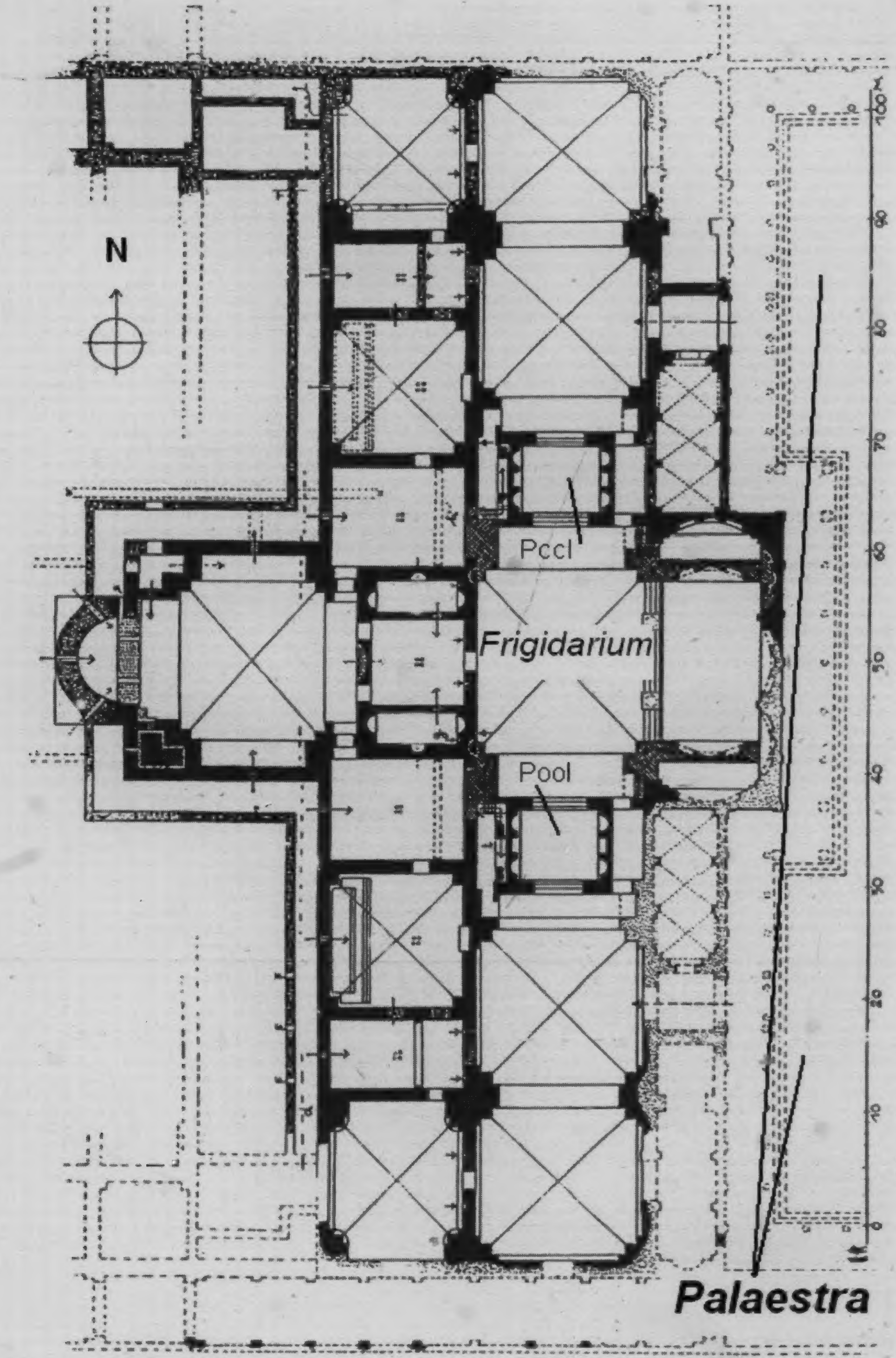
N
Pool
Frigidarium
Pool
Palaestra

Figure A3.5.2

3) Artworks associated with the *palaestra*

None.[84] Gauckler provides a description of some of the artworks found inside the baths and Dunbabin mentions that there were three fragments of mosaic with athletic scenes, which included a boxer holding a palm as well as the head of another figure.[85]

4) Date of *palaestra*

The date of the baths is usually placed at the end of the 2nd or the beginning of the 3rd century AD. The date is based on the style of the Ionic capitals found in front of the building believed to be a part of the original decoration of the building.[86] Krencker also notes that some transformations were made inside of the baths and thus it is possible they were constructed earlier in the 2nd century.[87] Nielsen states that the baths were destroyed in AD 371 but statues dated to the 4th and 5th centuries found inside suggest that they were in use later than this.[88]

5) Excavation Bibliography

Waille, V.,
______ *CRAI* (1886) pp.301-305
______ *CRAI* (1887) pp.53-58 & 232-236
______ *CRAI* (1888) pp.35-41 & 241-250
______ *CRAI* (1889) pp.360-368
Gauckler, P., *Musée de Cherchel* (Paris, 1895) pp.55-63 & 160-161
Gsell, S., *Les monuments antiques de l'Algerie* (Paris, 1901) pp.212-216
Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.190-196

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[84] For information regarding the sculptures found at the baths see C. Landwehr, *Die römischen Skulpturen von Caesarea Mauretaniae. Denkmäler aus Stein und Bronze I. Idealplastik: Weibliche Gifuren benannt* (Berlin, 1993) and Ç. Landwehr, *Die römischen Skulpturen von Caesarea Mauretaniae II.Idealplastik: männliche Figuren* (Mainz, 2000).

[85] P. Gauckler, *Musée de Cherchel* (Paris, 1895) pp.55-63 and K.M.D. Dunbabin, *The Mosaics of Roman North Africa: Studies in Iconography and Patronage* (Oxford, 1978) p.255.

[86] Thébert (2003) p.191.

[87] Krencker (1929) p.192. Thébert (2003) p.191 does not believe it was before the 2nd century AD because the style of the framing was much too ambitious for anyone prior to this date.

[88] Nielsen (1990) v.2, p.29. Thébert (2003) pp.191-192 gives the date of the statues found in these baths.

Gsell, S., *Cherchel : Antique Iol-Caesarea* (Alger, 1952) pp.110-116
Lezine, M.A., *Architecture romaine d'afrique : Recherches et mises au point* (Tunis, 1961) p.24
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.88-94
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.191-193

6) Textual evidence

None.[89]

6. Karthago (Carthage): Antonine Baths

1) Location/Urban context of *palaestra*

The Antonine Baths are the largest baths in the ancient city of Karthago (Carthage) in Tunisia and are located on the shore in the northeastern area of the city. They were constructed using *opus incertum* (Figure A3.6.1). The baths are symmetrical, slope southwards and cover about 4 blocks.[90] Y. Thébert estimates that the entire area of the baths measured around 35 000 m².[91] The baths have two *palaestrae*, which are symmetrical and lie close to the shore. Carthage possessed many entertainment structures, including the Odeon and theatre 500 m to the northwest. There was a circus and an amphitheatre in the southwest of the city. Although ancient authors, such as Tertullian and St. Cyprian, mention that Carthage had a stadium its exact location has not been determined.[92]

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[89] Pliny the Elder, *NH*.5.20 and Strabo, 17.3.12 did mention the city of Caesarea.

[90] M.A. Lézine, *Les Thermes d'Antonin* à *Carthage* (Tunis, 1969) p.17, and M.A. Lézine, *Carthage. Utique : Études d'architecture et d'urbaniseme* (Paris, 1968) p.5.

[91] Thébert (2003) p.141.

[92] Tertullian, *De Spectaculis* 11.3, 18.1, 20.5, 21.3 and 30.7: the references to the stadium in this work do not specifically state that the city of Carthage has a stadium. Instead Tertullian is likely mentioning the stadium only because of its association to athletic games. Tertullian, *Scorpiace* 6.2 : the stadium mentioned in this work is specific to Carthage and Tertullian likely refers to a stadium that existed in Carthage. See Chapter One for the discussion regarding the existence of a stadium at Carthage.

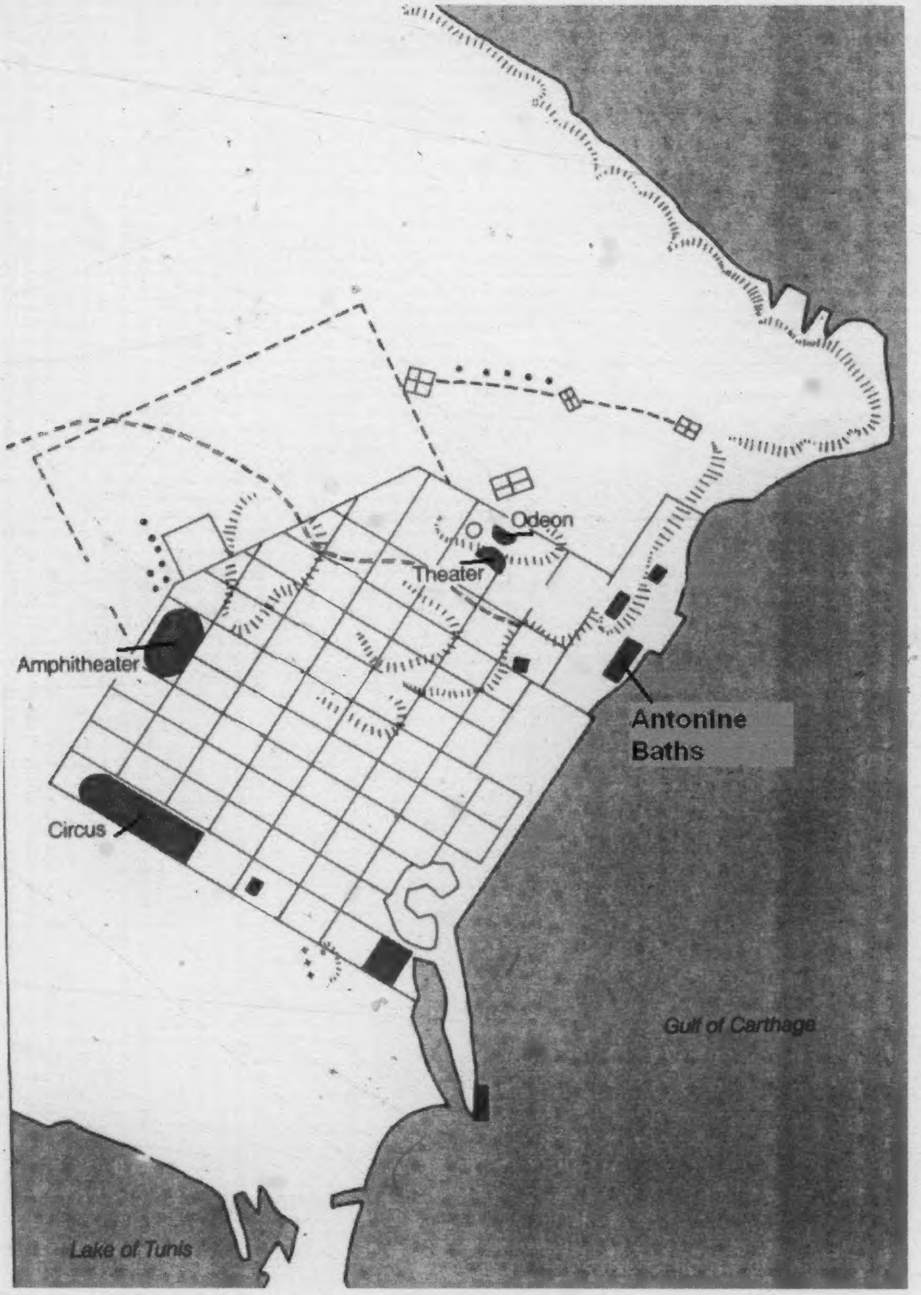
Odeon
Theater
Amphitheater
Antonine Baths
Circus
Gulf of Carthage
Lake of Tunis

Figure A3.6.1

2) Description of *palaestra*

The Antonine Baths possess two square *palaestrae* each measuring 37.6 m by 37.6 m around the exterior while the interior square measures 24.5 m by 24.5 m and was open to the sky (Figure A3.6.2).[93] Each *palaestra* had 36 columns made of yellow marble from Chemtou. The diameter of each column varied between 0.685 m to 0.695 m and they were 6.9 m in height. The capitals and bases of the columns were made from white Corinthian marble and combined with the column had a total height of 8.625 m.[94] The floor of the *palaestra* was paved with mosaic. Underneath the *palaestrae* were underground chambers paved with limestone and supported by pillars.[95]

Many rooms were connected to the *palaestrae*. The *frigidarium* was in the center of the baths and therefore positioned between both *palaestrae*. As the Antonine Baths are symmetrical only the south *palaestra* will be described, as the north one resembles it. Between the *palaestra* and the *frigidarium* was what Lézine identified as a room of transition.[96] Northwest of the room of transition was a *tepidarium*, while southeast was an unidentified room. There was an unidentified room to the southeast of the *palaestra*, while to the south was a rectangular roofed room.[97] To the northwest were two corridors leading to three different rooms. The room at the south end was unidentified, but the central room was octagonal and Lézine called this a change room (*apodyterium*).[98] The last room at the north end had a hot pool measuring 17.5 m by 13.5 m and it was 1.56 m deep.[99] Finally in the corner of the *palaestra* was the principal entrance into the bath building.[100] The heated rooms of the Antonine Baths were located in the northwest area of the baths. Other rooms, separated from the baths, are a part of the esplanade.[101]

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[93] M.A. Lézine, « Palestres ou basiliques? » *RA* 49 (1957) p.98. Thébert (2003) p.141 estimates that they covered 17 850 m^2.

[94] Lézine (1968) p.21 and J. Verite, « Ordre et désordres architecturaux aux thermes d'Antonin a carthage » *cedac Carthage* 7 (1986) p.28.

[95] Lézine (1968) p.21. Although these rooms are now confidently identified as *palaestrae*, in the 1950's there was debate that these rooms were possibly *basilicae*. See Lézine (1957) pp.98-99.

[96] Lézine (1968) p.21.

[97] A. Ben Abed Ben Khader, *et alii*, *Corpus des mosaiques de Tunisie, IV, Karthago (Carthage) 1, Les mosaiques du parc archeologique des thermes d`Antonine* (Tunis, 1999) p.2, and Lézine (1968) p.21. Lézine (1969) p.22 suggests that these roofed rooms were *gymnasia*, that were used in the winter when the open-air *palaestrae* were too cold to exercise in.

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[98] Lézine (1968) p.21, Ben Khader (1999) pp.5 & 8 describes them simply as octagonal rooms while Thébert (2003) p.142 does not believe there is enough evidence to say whether this was the function of the room or not.

[99] Lézine (1969) p.22.

[100] The entrance is in the north corner of the north *palaestra* and in the southwest corner of the south *palaestra*.

[101] See Thébert (2003) pp.142-143 and much of the excavation done by G. Picard, published in *BAC*, for more information regarding the rooms along the esplanade. See bibliography below for the issue and page numbers in *BAC* regarding the work of Picard.

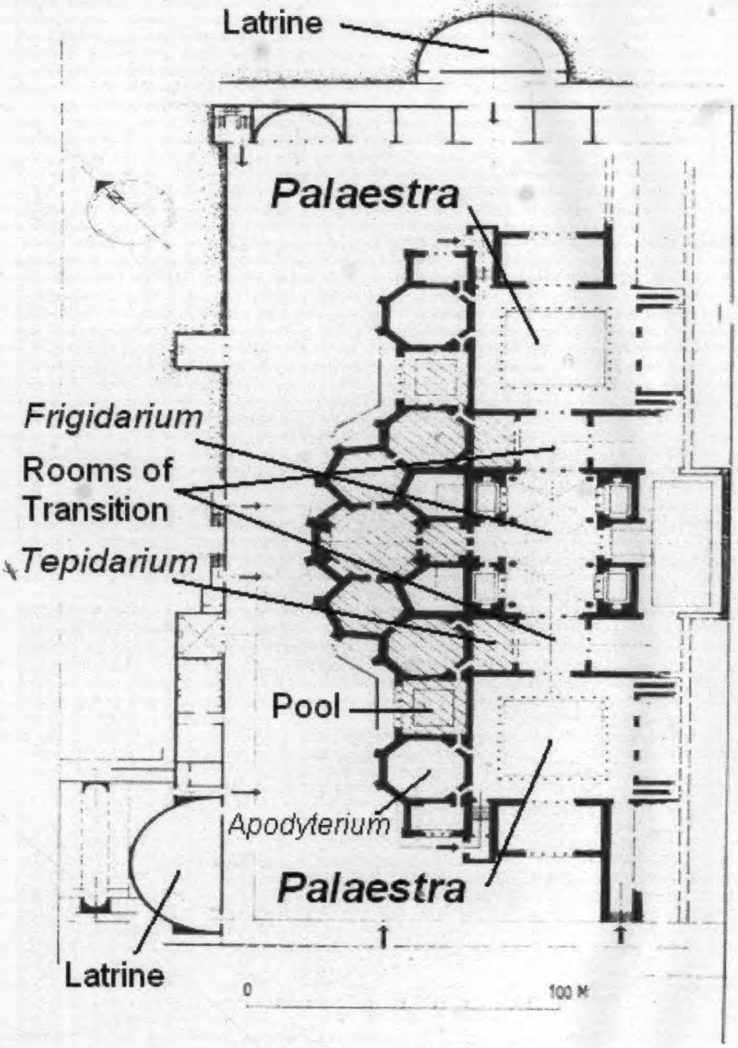

Figure A3.6.2

3) Artworks associated with the *palaestra*

The artwork on the floor of each *palaestra* was a simple black and white geometric mosaic with the design of overlapping half scales. Both mosaics appear to belong to the first stage of decoration and not those that were created later in the 4th century AD.[102]

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[102] Lézine (1969) p.33, Lézine (1968) p.42 and Ben Abed Ben Khader *et alii* (1999) pp.2 & 9.

Other important artworks found inside the baths were not located in the *palaestrae*, but are important to note as they may be connected to the function of this space. To the north of both *palaestrae* is the octagonal room where there were fragments of a mosaic showing athletes. In the south octagonal room there is a mosaic showing a couple of wrestlers within a dodecagon, while in the north octagonal room there is a mosaic showing athletes surrounded by horses.[103] The latter mosaic also had a hexagonal medallion picturing two palms and a black circular object decorated with yellow rafters.[104] All of these images are believed to belong to the 4th century AD when the baths were redecorated with new mosaics.[105] Finally Lézine also mentions, but does not specify where in the baths, the discovery of the bust of a wrestler.[106]

4) Date of *palaestra*

An inscription, most likely from the edifice of the baths, was found in many pieces and mentions the emperor Antoninus Pius (AD 138 to 161).[107] Y. Thébert notes that although it was initially thought to refer to a restoration of the building, it is now agreed that it actually celebrates the dedication of the baths.[108] Another inscription found in the baths celebrates the completion of the decorations and is dated around 162.[109] Later restorations were made sometime between AD 388 and 389.[110] The Vandals subsequently destroyed the baths in the 5th century AD. In the Byzantine period, after AD 530, whatever remained of the baths was used for other purposes until they were eventually abandoned sometime after 638.[111]

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[103] Ben Khader (1999) pp.2-8 and M.A. Lézine, "Observations sur la ruine des Thermes d'Antonin à Carthage" *CRAI* (1956) p.426. G. Picard, « Rapport sur l'activité du Service des Antiquités et Arts de la Tunisie dans le second trimestre » 1946 *BAC* (1946-49) p.152 feels that the appearance of the individual on the mosaic, with the pressed nose and hair, signifies an athlete.

[104] Ben Khader (1999) p.8. Whether the palm leaves and the circular object had anything to do with athletics or horse racing is uncertain, but its presence seemingly has some relation to the athletes and horses.

[105] Ben Khader (1999) p.2 and Lézine (1968) p.42.

[106] Lézine *CRAI* (1956) p.426.

[107] *CIL*, 8.12513; *ILTun*.890. See # 1, in the Carthage part of section one in Appendix Four.

[108] Thébert (2003) p.141.

[109] *AE*, 1949.27. G. Picard *BAC* (1946-1949) pp.219-221 argues for this date. See # 2, in the Carthage part of section one in Appendix Four.

5) Excavation Bibliography

Vernaz, J., « Note sur des fouilles à Carthage » *RA* X (1887) pp.11-27 and 151-170 and pl.XIII
Picard, G.,
______ *BAC* (1946-49) pp.61-62, pp.114-118, pp.149-153, p.367, p.507, p.619, & pp.673-676
______ *BAC* (1950) pp.74-77 & pp.154-155
______ *BAC* (1951-52) pp.93-94 & p.190
______ *BAC* (1953) pp.40-41
______ *BAC* (1954) pp.97-103 & p.175
______ *BAC* (1955-56) p.115
Lézine, M.A., "Observations sur la ruine des Thermes d'Antonin à Carthage" *CRAI* (1956) pp.425-430
Lézine, M.A., « Palestres ou basiliques? » *Revue archéologique* 49 (1957) pp.98-99
Lézine, M.A., *Carthage. Utique : Études d'architecture et d'urbaniseme* (Paris, 1968) pp.1-77
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Verite, J.,
______ « Ordre et désordres architecturaux aux thermes d'Antonin a carthage » *CÉDAC Carthage* 7 (1986) pp.26-34
______ « Recherches sur la facade maritime des thermes d'Antonin a carthage » *CÉDAC Carthage* 11 (1990) pp.47-49
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.87-90
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.192-196
Verite, J., « Recherches sur la facade maritime des thermes d'Antonin a carthage » *CÉDAC Carthage* 13 (1993) pp.54-63
Ben Abed Ben Khader, A., *et alii, Corpus des mosaiques de Tunisie, IV, Karthago (Carthage) 1, Les mosaiques du parc archeologique des thermes d`Antonine* (Tunis, 1999)
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.141-143

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[110] *AE*, 1949.28.
[111] Lézine (1968) pp.67-74 and Lézine (1969) p.40.

6) Textual evidence

None. Although there are no inscriptions referring specifically to the *palaestrae* there are a few inscriptions mentioning the baths. Most of these are discussed above but G. Picard argues that the inscription celebrating the completion of the baths' decorations may mention the *palaestrae*. Although the exact provenance of the inscription is unclear, Picard believes that it was placed in one of the *palaestrae*. This being the case he argues that the words *et columnis* (?) should be restored before the word *numidic*(*is*). If restored it would refer to the *palaestrae* in the Antonine Baths. There is nothing, however, to suggest this restoration is correct.[112] Apart from this one example no other inscriptions mention the *palaestra*.

7. Lambaesis (Lambèse): Camp baths

1) Location/Urban context of *palaestra*

The Camp Baths at Lambaesis (Lambèse) in Algeria are located at the foot of the northern slope of the Aurès Mountains. The 3rd Augustan Legion founded the fortress during the reign of Hadrian and the site became the permanent quarters in the region.[113] The baths are rectangular and located in the southeast corner of the camp (Figure A3.7.1). They were constructed using the *opus incertum* and *opus africanum* techniques and covered around 2700 m^2.[114] Although the Camp Baths are symmetrical they differ from most other Roman baths in that the *frigidarium* does not lie on the main axis. Instead there are two *frigidaria* and the *laconicum* is at the center of the baths. The baths occupy a large rectangular lot measuring 60 m by 110 m and streets surrounded all four sides. The west side faces the main colonnaded street and this is where the primary entrances into the baths are located. The south side of the lot had an elaborate aqueduct on arches that brought water into the baths, while the *palaestra* was at the north end of the structure.[115] Lambaesis has another bath with a *palaestra*, located northeast just outside of the camp called the 'Large' or the 'Palais du Légat' Baths. There is also an amphitheatre located to the east of the camp baths.

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[112] G. Picard *BAC* (1946-1949) pp.219-221. *AE*, 1949.27.

[113] Lepelley (1981) p.416.

[114] Thébert (2003) p.210. Nielsen (1990) v.2, p.29 gives an area of 3070 m^2, while S. Gsell, *Les monument antiques de l'Algerie*, I (Paris, 1901) gives 2000 m^2. It is unclear what Nielsen included in her measurements and what Gsell did not, however the latter did not mention the *palaestra* and one would think its absence would account for a smaller total area.

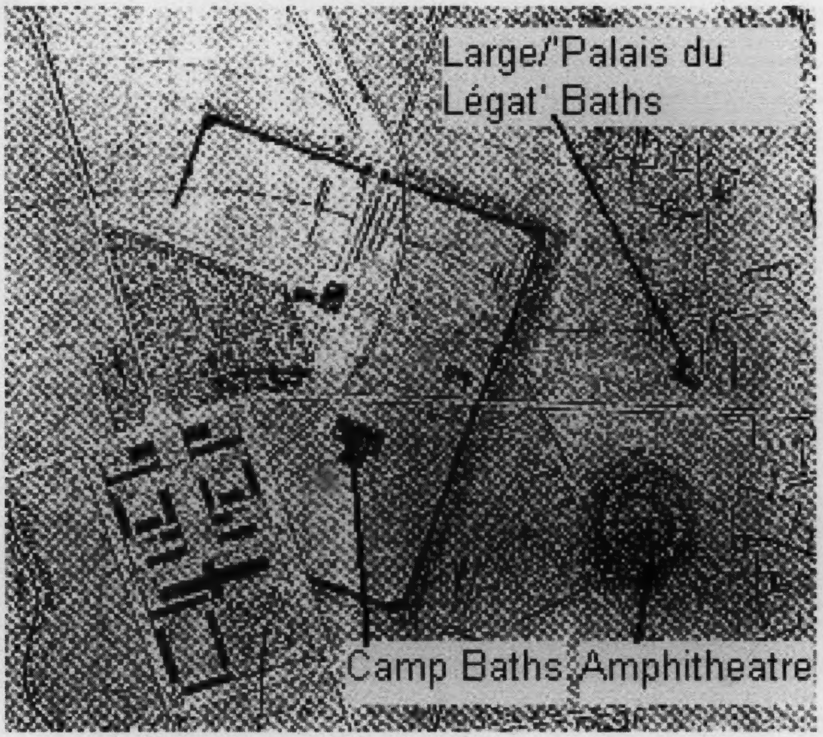

Figure A3.7.1

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[115] Yegül (1992) p.216, and Thébert (2003) p.210. Krencker measures the lot at 63 m by 117.5 m.

2) Description of *palaestra*

There appear to be two main entrances into the baths, both on the west side (Figure A3.7.2). The entrance at the south end seems to be secondary, while the north entrance served as the main access into the bathing facilities. This area is not well excavated or documented, but it appears that one enters from outside into a corridor that ultimately leads into the *palaestra*. There are also some other rooms along this same side. Krencker believes that the latrine is located somewhere in this area, but as of yet it has not been located and the remaining rooms remain unidentified.[116] It is plausible that the east side of the *palaestra* possessed similar rooms, as the baths are symmetrical. In the center of the *palaestra* is a court measuring approximately 25 m by 25 m and it is surrounded on three sides by colonnades. The remains of the *palaestra* are not published. South of the *palaestra* but before the main bathing rooms is a long corridor measuring 8 m by 60 m. Doors at the west and east ends of the promenade of the *palaestra*, as well as two other doors located within the court, lead into this hall. Ballu suggested this area was used for exercise, while Krencker proposed that it was a change room.[117] Although there is nothing to substantiate either claim, both hypotheses are plausible.

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[116] Krencker (1929) p.207.

[117] A. Ballu, *BAC* (1906) pp.CLXXII-CLXXIII and Krencker (1929) p.207.

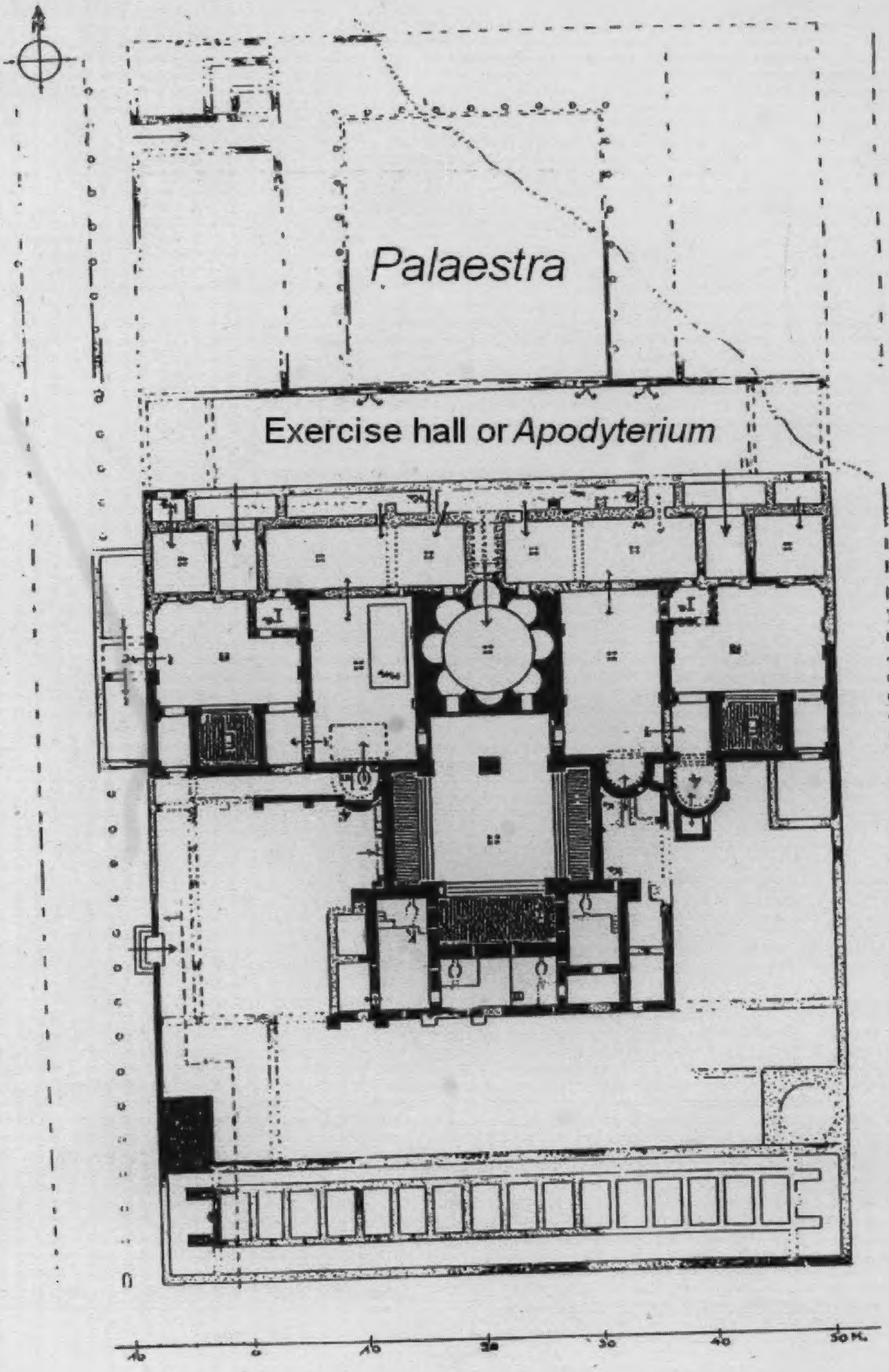

Figure A3.7.2

3) Artworks associated with the *palaestra*

None.

4) Date of *palaestra*

Nielsen suggests that the baths were constructed around the mid-2nd AD and then were subsequently restored during the Severan period. Later the baths were completely rebuilt sometime between AD 260-269.[118] The mid-2nd century date is based on an inscription found near the amphitheatre. It mentions a bath structure and dates to the Hadrianic period.[119] There is nothing however to suggest this inscription refers to the Camp Baths. Thébert notes that the limestone construction of the baths was typical of the Hadrianic period, which supports this early construction date.[120]

Another inscription mentions the restoration of some bath during the Severan period (AD 192-225). However the provenance of this inscription is unknown and it may in fact refer to an entirely different bathing complex.[121] The inscription that Nielsen uses to suggest that the Camp Baths were rebuilt around the 260's also has no provenance and again may be referring to a different structure.[122] Thébert concurs that these baths may have been built during the mid-2nd century but notes that there is no conclusive evidence for this hypothesis.

Yegül and Gsell suggest a late 2nd to early 3rd century date for the construction of this establishment.[123] Building materials found at the site dating to the Severan period and later support this late date. Bricks within the baths have stamps with the name *Pia Vindex* on them, referring to the 3rd Augustan Legion that was stationed at Lambaesis between AD 194-195 and 238.[124] This suggests that the baths were constructed during the Severan period. The stamps could also support the idea that the Camp Baths were restored at this time rather than constructed. Due to all of the speculation no exact date can be given for these baths; however it is safe to say that they were built before the 3rd century AD. It is assumed that the *palaestra* was built at the same time as the rest of the structure.

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[118] Nielsen, vol.2 (1990) pp.29-30. Krencker (1929) p.206 also suggests a mid-2nd century AD date.

[119] *CIL*, 8.2692: *balin*[*eo*...].

[120] Thébert (2003) p.210.

[121] *CIL*, 8.2706: *balneum*.

[122] *AE*, 1971.508: *thermas*.

[123] Yegül (1992) p.216, and Gsell (1901) p.84.

5) Excavation Bibliography

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Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.216-217
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.209-211

6) Textual evidence

As previously noted, there are a few inscriptions found in Lambaesis that mention a bath but none can be specifically linked to the Camp Baths.[125]

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[124] Thébert (2003) p.209. There were also brick stamps with the words *Pia Fidelis*, which dated to around the time of Diocletian (AD 284-305). For more information on the brick stamps of the 3rd Augustan Legion see Y. LeBohec, « Les marques sur briques et les surnoms de la IIIe Légion Auguste » *Epigraphica* 43 (1983) pp.127-160.

[125] Thébert (2003) pp.507-508 (#'s 117-121). Cyprian, *Epist*.59.10.1, mentions the city.

8. Lambaesis (Lambese): Large Baths/Palais du Légat

1) Location/Urban context of *palaestra*

A second bathhouse in Lambaesis, called the Large Baths, or Palais du Légat, is located just outside of the military camp (Figure A3.7.1). They were constructed using the *opus africanum* technique. The Large Baths are symmetrical and cover a little more than 3000 m², 6000 m² with the inclusion of the *palaestra*.[126]

2) Description of *palaestra*

The principal entrance into the Large Baths appears to be at the southeast end of the structure (Figure A3.8.1). The *palaestra* is at the northeast end and takes up nearly half of the total area of the baths. Krencker stated that the *palaestra* was surrounded on three sides by a portico while the fourth side abutted the main bath complex.[127] A semi-circular latrine is located in the northwest, but it has not been studied in any detail.[128]

On the southwest side of the *palaestra*, there was a long hall with an apsidal room at either end. Access into this hall was through one of these rooms. The hall provided entrance into another larger hall measuring 33 m by 9.5 m, with arches on each end and niches along the walls. Ballu, Touze and Thébert believe that this larger hall was used for exercising.[129] Doors at the center of this hall led into the *frigidarium* and its two cold pools. Doors at either end of this same hall also provided access into larger square rooms, suspected to be *apodyteria*.[130] The heated rooms are all located in the southwest of the baths.

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[126] Nielsen, v.2 (1990) p.30 and Thébert (2003) p.211.
[127] Krencker (1929) p.214.
[128] Thébert (2003) p.212.
[129] A. Ballu, *BAC* (1912) p.476, Touze « Notes sur les fouilles pratiquées aux nouveaux thermes », *RSC* 45 (1911) p.297, and Thébert (2003) p.212. Romanelli (1970) p.182 suggests that it was used for entertaining or changing, the latter being a more reasonable explanation.

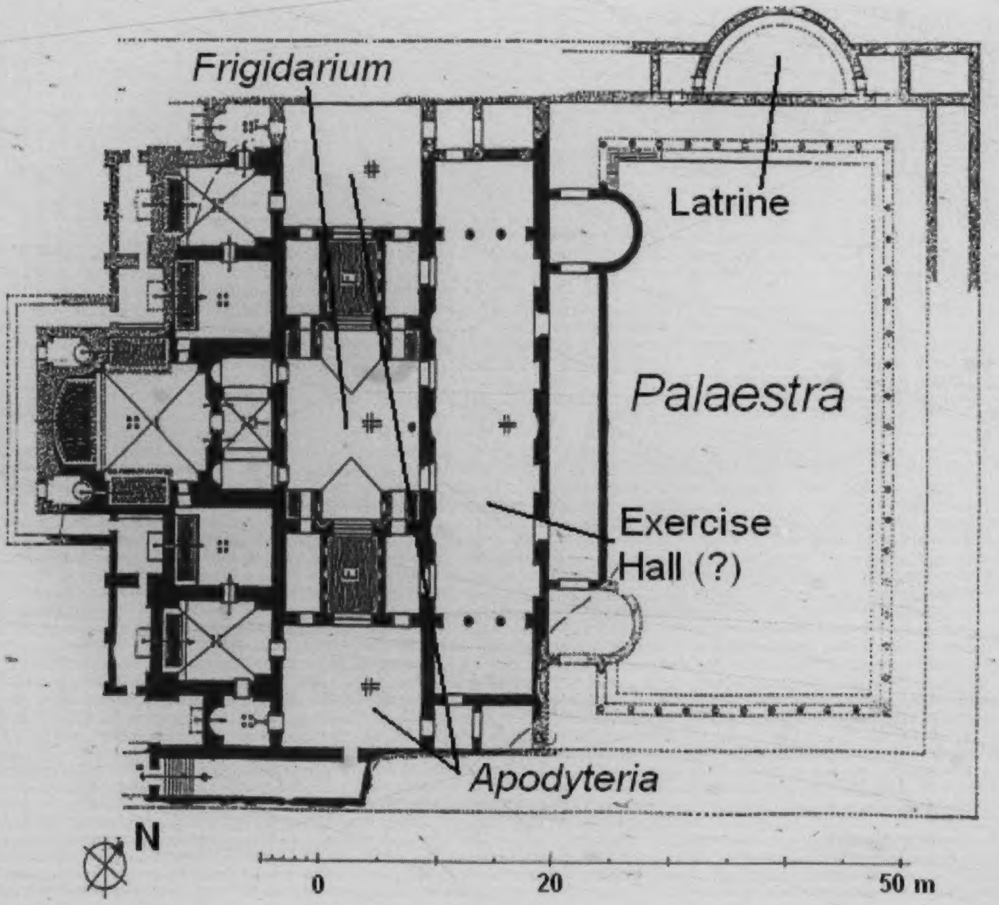

Figure A3.8.1

3) Artworks associated with the *palaestra*

There are no known artworks associated with the *palaestra* in the Large Baths in Lambaesis. Fragments of a statue were found in one of the rooms next to the latrine, but it has not been identified.[131] The bases of seven Hercules statues were also found, as well as some statues of women and animals, but they likely all belonged inside the main complex.[132]

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[130] Thébert (2003) p.212 proposes that these two rooms could be warm rooms (*tepidaria*).
[131] A. Ballu, *BAC* (1911) p.100.

4) Date of *palaestra*

Gsell and Nielsen argue that the baths were constructed during the late Roman period, perhaps during the 3rd or 4th century AD, because the building materials used for their construction date to these centuries.[133] Y. Thébert however disagrees with this date, instead opting for a late 2nd or early 3rd century AD date. He uses the bases of Hercules statues and brick stamps for his evidence. The bases of the statues all date somewhere between AD 197 and 201 because of the individuals mentioned on the inscriptions. Brick stamps also carry the name of *Pia Vindex*, referring to the 3rd Augustan Legion stationed here at the end of the 2nd century AD.[134] Based on this evidence the Large Baths were likely constructed around AD 200.

5) Excavation Bibliography

Renier, *Archives des Missions*, II (1851) p.178, *Rec. de Constantine*, XXIII (1883-4) pp.194-195 and *Rec. de Constantine* XXVIII (1893) pp.97-100
Gsell, S., *Les monument antiques de l'Algerie*, I (Paris, 1901) p.220
Touze, « Notes sur les fouilles pratiquées aux nouveaux thermes », *RSC* 45 (1911) pp.297-304
Ballu, A., *BAC* (1911) pp.97-100
Weydert, N.-E., « Inscriptions des thermes de Lambèse » *BAC* (1912) pp.345-355
Ballu, A., *BAC* (1912) pp.476-479
______ *BAC* (1913) pp.158-159
Bayet, J., « Les statues d'Hercule des grands thermes de Lambèse » *RSC* 48 (1914) pp.1-35
Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.214-215

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[132] Touze (1911) p.300. See J. Bayet « Les statues d'Hercule des grands thermes de Lambèse » *RSC* 48 (1914) pp.1-35 for a more in-depth discussion of the Hercules statue bases.
[133] Gsell, v.1 (1901) p.220 and Nielsen, v.2 (1990) p.30.
[134] Thébert (2003) p.211 and pp.508-510, #'s 122-128.

Romanelli, P., *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) p.182
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.87-90
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.202-205
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.211-212

6) Textual evidence

None.[135] No inscriptions were found referring to these particular baths, but a fragmentary inscription was found in one of the rooms near the latrine, mentioning Marcus Aurelius.[136] M. Christofle noted that there were two mosaics with text on them but they no longer exist. Another mosaic in the baths had the words *Bene lava* (bathe well) but again it is not clear where this mosaic was located.[137] Two identical inscriptions were found on one of the walls of the *frigidarium* with the term *gymnasium* but again they no longer exist.[138]

9. Lepcis Magna (Labdah): Hadrianic Baths

1) Location/Urban context of *palaestra*

The Hadrianic Baths at Lepcis Magna (Labdah) are located in the south end of the city and are orientated exactly north to south (Figure A3.9.1). They are the first baths built in the Imperial style and are the second largest in Africa.[139] They measure approximately 100 m by 80 m not including the *palaestra* and were constructed largely of sandstone and limestone blocks with marble facing.[140] A colonnaded street runs along the west side at an angle and has shops bordering the wall. On the other side of this street is the wadi (stream) Lebdah, which runs north to the harbor and into the sea. To the east and south of the baths are unexcavated areas. The *palaestra* is located on the north side but located east of the main axis. There is a theatre to the north of the baths and an amphitheatre and circus at the east end of the city along the coast.

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[135] Cyprian, *Epist.*59.10.1, mentions the city.

[136] Ballu, *BAC* (1911) p.100. See # 1, in the Lambaesis, Large Baths/Palais du Légat, part of section one in Appendix Four.

[137] Christofle (1930 & 1933) pp.229-230. See Thébert (2003) pp.508-510, # 131 for Christofle and # 132 for the other one.

[138] *AE*, 1914.19. Touze (1911) p.299 says that each inscription is below a niche in the *frigidarium*, but Thébert (2003) p.510 finds no evidence for this and points out that their exact location is unclear. See discussion in Appendix One on the meaning of the word *gymnasium*.

[139] Yegül (1992) pp.186-190.

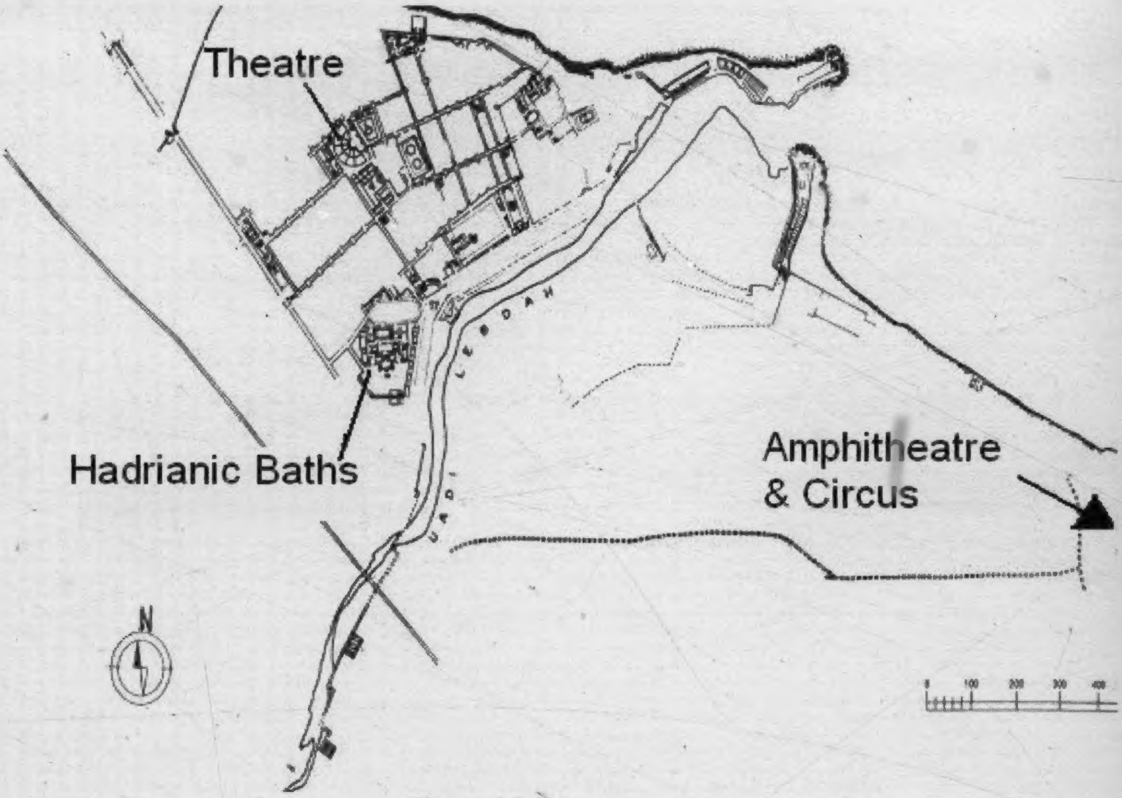

Figure A3.9.1

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[140] G. Fraser, & A.W. Van Buren, "Roman Bath at Lepcis" *MAAR* 10 (1932) p.130 and M.F. Squarciapino, *Leptis Magna* (Basel, 1966) p.90. Romanelli (1970) p.175 states that the baths cover 6000 m² but this figure does not seem plausible and surely must not include the *palaestra*. She gives the total area of the *Palaestra* Baths at Gigthis the same measurement of 6000 m². This would mean these two baths were the same size, when they are not.

2) Description of *palaestra*

The *palaestra* is open to the sky and is at the north end of the baths (Figure A3.9.2). As it was off axis from the main baths the area extended further east. It is rectangular but the east and west ends are semicircular, making the length approximately 110 m and the width 40 m.[141] A walkway went entirely around the *palaestra*; this is raised two steps above the court. There are five entrances into the *palaestra*. There was one entrance located in each semicircular end, another in the small niche behind the west semicircular end and lastly one just to the east of the east exedra and one between the *exedrae*. The columns stood on the walkway and the Corinthian capitals were made of Cipollino marble. They measured 4.15 m in height, and from centre to centre are spaced 3.5 m apart. The bases were made of white marble and measured 28-32 cm.[142] Fraser and Van Buren note that there were holes present in the pavement of the walkway and believe they were for setting up athletic equipment.[143] There is however nothing to substantiate this theory. The court had a paved limestone path running east to west directly down the centre. There are also three paved paths running north to south, equidistant from each other and leading to doors giving access into the baths. Each limestone block in the path measured around 0.5 m by 0.5 m by 0.8 m.[144]

The north side of the *palaestra* has two *exedrae* covering around 360 m² each.[145] Both had an interior square portico surrounded by 12 columns and an apse at the back, while the east exedra had a pool in the centre of its court. The walls at the back of the apse were faced in marble. The east exedra had a door leading outside with two steps on both sides. Bartoccini suggests that these two areas were added at a later date but gives no explanation or justification for this argument.[146]

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[141] Romanelli (1970) p.175 gives the measurements of 100 m by 30 m. Fraser and Van Buren (1932) p.130 give the total area of the *palaestra* of 7000 m².

[142] R. Bartoccini, *Le Terme di Lepcis* (Bergamo, 1929) p.26 and Squarciapino (1966) p.90.

[143] Fraser and Van Buren (1932) p.130.

[144] Bartoccini (1929) p.30.

[145] This calculation is based on the map and scale given by R.B. Bandinelli, *The Buried City: Excavations at Leptis Magna*, (New York, 1966) p.100, fig.242.

As mentioned, a walkway ran along the entire length of the *palaestra*. At one end of this walkway was a porch 6.3 m wide and a stone block 1 m high. Bartoccini suggests that a statue of Hercules was placed on top of the block because traces of sculpture and a fragmentary inscription, believed to refer to Hercules, were found. He hypothesizes that the area was used for the worship of Hercules.[147]

The walkway provided access into the baths at five different locations. Beginning at the west end of the walkway, there was an opening that led into a room with columns on three sides, described as an *atrium* by Bartoccini and a change room by Krencker.[148] The next entrance from the *palaestra* into the baths was 2.48 m wide and opened into the cold pool. Next was an *atrium*/change room that provided access to the *palaestra*. East of this room was a corridor, which also opened into the *palaestra*. The last opening along this walkway was at the east end and it opened into a long triangular area. This area led all the way to the south of the baths and was likely the service entrance for those stoking the furnaces underneath the hot rooms.

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[146] Bartoccini (1929) pp.74, 93 & 169. See the relevant sections on inscriptions and artwork for the descriptions of the materials found in these two *exedrae*.
[147] Bartoccini (1929) p.30. Bartoccini also suggests that the god Liber was worshipped here because another base was discovered in the vicinity alluding to this god. The inscription on the base of this stone read [*Deo He*]*rculi* / [*Sanc*]*to*.
[148] Bartoccini (1929) p.38 and Krencker (1929) p.217.

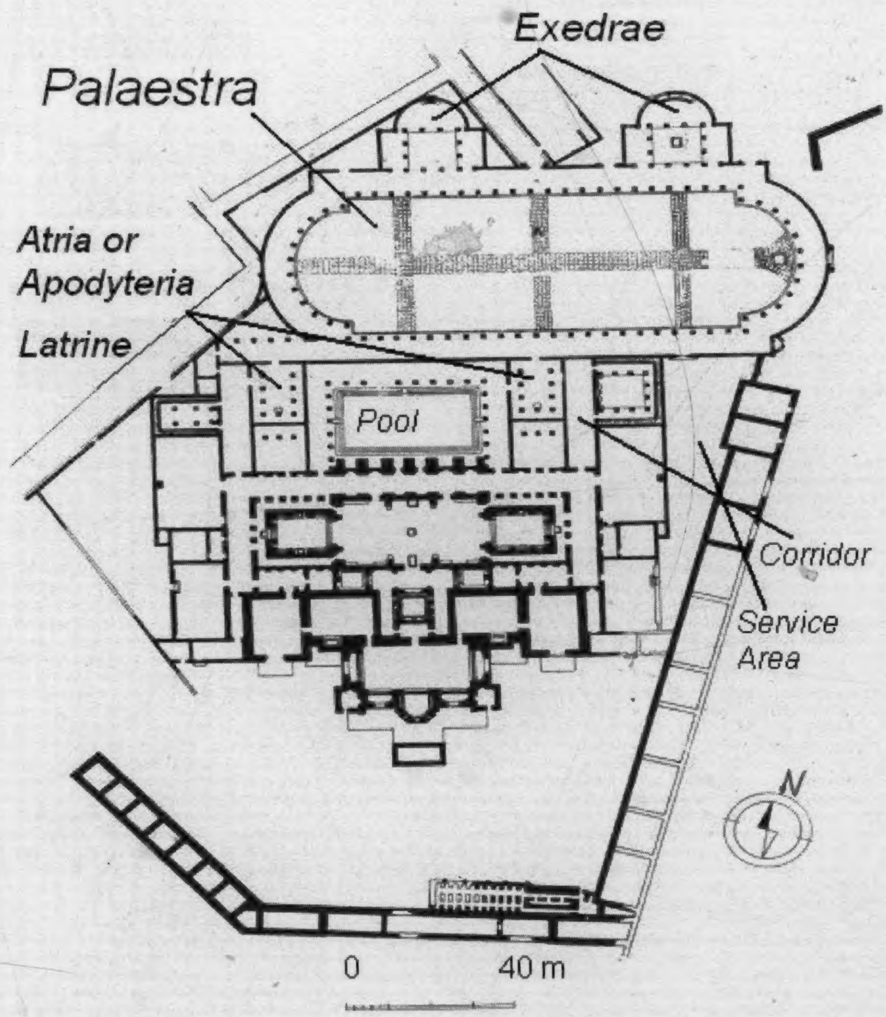

Figure A3.9.2

3) Artworks associated with the *palaestra*

The only artworks associated with the *palaestra* are the few fragments of the Hercules sculpture located at the east end of the walkway running in front of the baths. Other than this the only other areas to yield artwork were the two *exedrae*. There was a statue of a woman and two of magistrates in the east, while in the west exedra there were two statues of women and one of a magistrate. All were found without heads.[149] The excavation of the Hadrianic Baths also uncovered a sculpture of what Bartoccini called a *palaestrita* (someone who attends the *palaestra*) but its provenance is not given.[150] It is therefore impossible to know whether this statue decorated the *palaestra* or some other area of the bath.

4) Date of *palaestra*

The Hadrianic Baths are dated to AD 126/7 based on the dedicatory inscription mentioned above. There were also brick stamps found that dated to AD 123, reinforcing this conclusion.[151] Other inscriptions tell us that major renovations occurred during the reigns of Commodus and Septimius Severus.[152]

5) Excavation Bibliography

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Squarciapino, M..F., *Leptis Magna* (Basel, 1966)
Romanelli, P., *Topografia e archeologia dell'africa romana, in enciclopedia classica*, sez.III vol.IX t. VIII (Turin, 1970) pp.175-178
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.87-90
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Yegül, F., Baths and Bathing in Classical Antiquity (New York, 1992) pp.186-192

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[149] Bartoccini (1929) pp.169-173.
[150] Bartoccini (1929) pp.142-146.
[151] *CIL*, 15.1029 C: taken from Yegül (1992) p.449 n.9.
[152] *ILS*.3.1.236 for Commodus and *IRT*.396 & 393 for Septimius Severus.

Di Vita, A., Di Vita-Evrard, G. & Bacchielli, L., *Libya: The lost cities of the Roman Empire* (Cologne, 1999)

6) Textual evidence

There are no literary sources that mention these baths or the *palaestra*.[153] An inscription which stood along the north façade of the main complex states that Publius Valerius Priscus dedicated the baths to Hadrian.[154] Unearthed in the west exedra, just to the north of the *palaestra*, were two inscriptions. One is very fragmentary and mentions a bath, but it is unclear exactly which bath. It is likely that it refers to the Hadrianic Baths as it was found close to them. The other was a funerary inscription and may have been erected at a later date.[155]

10. Mactaris (Maktar): Large East Baths

1) Location/Urban context of *palaestra*

The Large East Baths at Mactaris (Maktar) in Tunisia are located at the east end of the city, just south of the *forum* and measure 85 m by 54 m or around 4400 m^2. The baths are constructed using the *opus incertum* technique and are symmetrical. The principal entrance into the structure is at the northeast side, but there was also an entrance at the southeast.[156] The north entrance was connected to a large paved avenue coming from the agora.[157] There were two *palaestrae* in the Large East Baths, one located in the northeast and another in the southeast. The *frigidarium* and cold pools lay between them, and the heated rooms were all located at the west end of the building. The city of Mactaris had one amphitheatre located at the north end of the city. On the west side of the city there was also a courtyard surrounded by a portico, which Picard describes as a gymnasium.[158]

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[153] There are accounts that mention the city of Lepcis Magna. See for example Sallust, *Bell.Jug.*77, Livy, 34.62 and Caesar, *Bellum Africum* 97.3.

[154] *IRT*.361. See # 1, in the Lepcis Magna part of section one in Appendix Four.

[155] See Bartoccini (1929) p.93 suggests that the funerary inscription dated to the Severan period based on the style of the letters. See same page for the discussion on both inscriptions. See also #'s 2 & 3 in the Lepcis Magna part of section one in Appendix Four.

[156] It is unclear whether there were another two entrances along the east side of the baths. The diagram provided by Thébert (2003) p.595 fig.2 seems to suggest that there were.

[157] G. Picard, « Les fouilles de Mactar (Tunisie) 1970-1973 » *CRAI* (1974) p.13.

2) Description of *palaestra*

As the baths are symmetrical only one *palaestra* will be described in detail (Figure A3.10.1).[159] One enters into the baths at the northwest into a small vestibule flanked by two other small rooms. Access into the *palaestra* is from one of these smaller flanking rooms. The *palaestra* measures around 15 m by 17 m, not including the exedra to the west. A portico surrounds the entire court and had 10 columns, 4 uniform pillars, 4 four pillars and twelve pilasters.[160] The floor of the court was paved with limestone and likely was open to the sky. The floor under the portico was paved with black and white mosaics. There was no architrave or frieze recovered from the arcades of the peristyle of the *palaestra*, but Picard believes that there must have been one.[161] Picard suggests that the *palaestrae* in this bath were used for meeting and walking, saying that if they were for exercise then there should be rooms for oiling and dusting the body as well as a room for holding athletic accessories.[162] Although this cannot be ruled out, the majority of the other baths possessing a *palaestra* in this study do not have these accompanying rooms.

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[158] G. Picard, "*Civitas Mactaritana*", *Karthago* 8 (1957) pp.96-119 and A. Merlin « IV. Gymnase de Mactar », *BAC* (1946) pp.370-374.
[159] The measurements for both *palaestrae* are similar.
[160] Picard (1974) p.19.
[161] Picard (1974) p.21.
[162] Picard (1974) p.18. If the area was not used for exercise then I would suggest that it was not a *palaestra* and should be identified as something else.

There is also nothing to suggest that oiling and dusting were not done in one of the unidentified rooms and not in the *palaestra* itself.

To the southeast of the *palaestra* is a small room with no clear function except to provide access to the east of the baths. South of the *palaestra* is what Picard believes is a change room with four niches used to hold the bathers' clothes.[163] This room also appears to provide access to the large cold pool belonging to the *frigidarium*. West of the *palaestra* is a semi-circular exedra, separated by 6 pillars and paved with black and white mosaics. Immediately west from this room are more, smaller unidentified rooms. The *frigidarium*, measuring 19.20 m by 12.70 m, is south of the exedra.

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[163] G. Picard, « Les grands thermes orientaux à Maktar » *BAC* 8, (1972) p.152 and Yegül (1992) p.197.

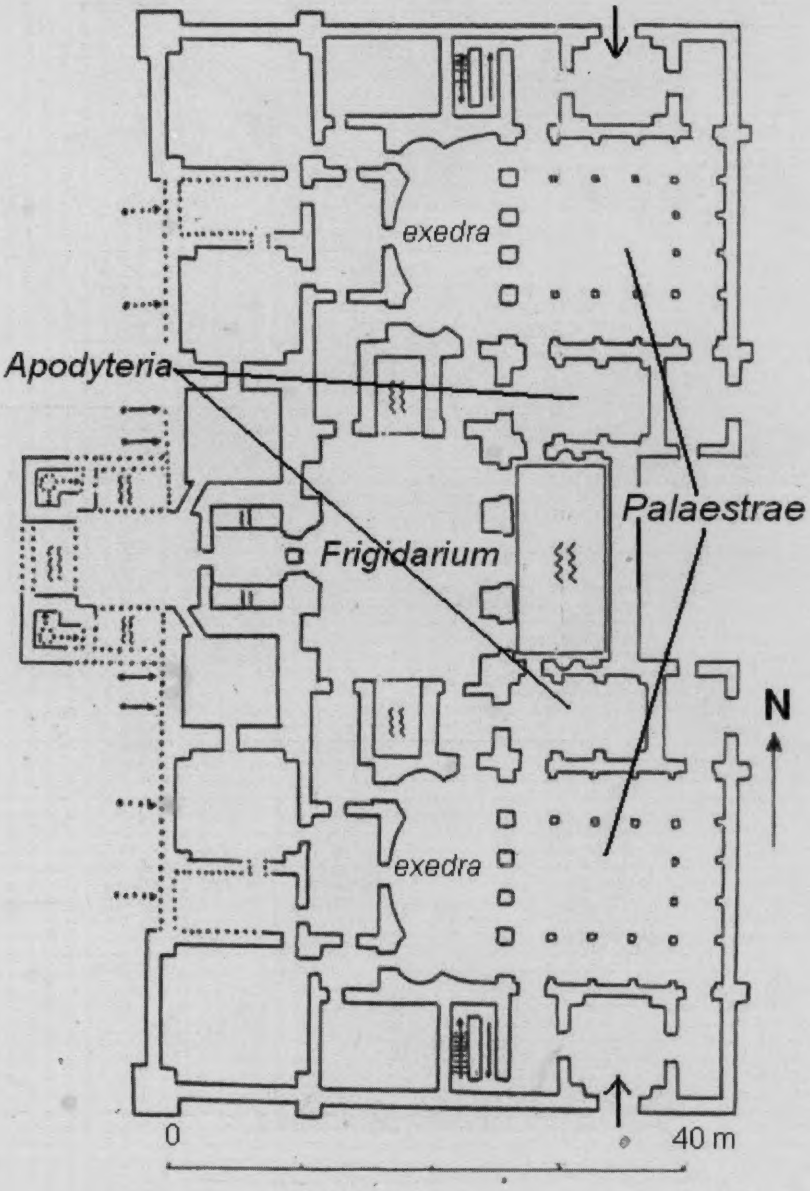

Figure A3.10.1

3) Artworks associated with the *palaestra*

No sculptures were found in the *palaestra* but some were found in the baths.[164]

One of these sculptures, its exact provenance unknown, was a low relief limestone slab measuring 1.53 m by 0.54 m and 0.5 m thick. On it were six athletes separated into three pairs. On the far right were two nude wrestlers engaged in combat with one man clearly in control of the match. One individual has his opponent's arm locked behind his back and their legs are entangled. The tops of their heads are missing, erased by the elements; moreover a large crack destroyed some of the stone. The second group appears to be a continuation of the first showing the same two wrestlers. The scene appears to illustrate the end of the same match with the athlete on the right unbalancing his opponent and about to throw him to the ground. The head of the victor has disappeared but the loser has thick hair on top of his head and some hair on his chin.

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[164] G. Picard, « Rapport sur l'archéologie romaine en Tunisie pendant l'année 1951 » *BAC* (1951-52) p.196.

The figures in the third pair are separated from each other. G. Picard believed that the figure on the right was Hercules because of the club and lioness that accompany him. The figure faces to the right, with his legs crossed, and appears to be dancing.[165] The man he faces is smaller than the rest and is closest to the top of the limestone slab. He is naked and holds a crown in his right hand. Picard believed that this individual could be Eros, because he is often associated with Hercules. He also notes that this individual does not possess wings and therefore could be the winner of a contest instead. This latter explanation seems most likely, as this individual surely represents the winner of the contest seen in the previous two scenes. After this third scene there is a large empty space.[166]

The black and white mosaics underneath the portico of the *palaestrae* were decorated with interconnected squares. Capitals were found in this area and each was decorated differently from the other.[167] The black and white mosaic in the *exedra* was in a labyrinth pattern.

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[165] Picard mentions other representations of Hercules posing similarly in Pergamon and Herculaneum but he is not sure of the connection they have with this pose on an athletic relief.

[166] G. Picard, « Un bas-relief agonistique à Mactar » *BCTH* n.s. 18b 1982 (1988) pp.95-99 hypothesizes that this end possessed another scene, perhaps the start of the wrestling contest.

4) Date of *palaestra*

The date for the construction of the baths and the *palaestrae* is AD 199. This date comes from the base of a statue dedicated to Septimius Severus found in the vestibule of the south entrance into the baths.[168] The structure was continually used as a bath at least until around AD 400 but was changed into a fortress during the Byzantine period.[169]

5) Excavation Bibliography

Picard, G., « Rapport sur l'archéologie romaine en Tunisie pendant l'année 1951 » *BAC* (1951-52) pp.189-217, esp. pp.195-199
______ « Les grands thermes orientaux à Maktar » *BAC* 8, (1972) pp.151-153
______ « Les fouilles de Mactar (Tunisie) 1970-1973 » *CRAI* (1974) pp.9-24
______ « Un bas-relief agonistique à Mactar » *BCTH* n.s. 18b 1982 (1988) pp.95-99
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.87-89
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.196-197
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.144-145

6) Textual evidence

None.

11. Madaurus (Mdaourouch): Large Baths

1) Location/Urban context of *palaestra*

The Large Baths at Madaurus (Mdaourouch) are located in the north part of the city (Figure A3.11.1).[170] The baths were constructed using the *opus quadratum* and *opus*

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[167] See Picard (1974) p.21 for a description of the decoration on the capitals.
[168] Picard (1972) p.152, Picard (1974) p.14 and Thébert (2003) p.144.
[169] Picard (1972) p.153 and Thébert (2003) p.144.
[170] An inscription verifies the name of this city, *ILAlg*.2152 : [*co*]*l*(*onia*) *Fl*(*avia*) *Aug*(*usta*) *Vete*[*ran*(*orum*) *Madauren*]*sium*.

africanum techniques. The structure measures 39 m by 41 m, making the total area around 1650 m².[171] The west side of the baths runs parallel to a major road running north to south and it is from this road that one enters. Between this road and the baths is where the *palaestra* is believed to have existed.[172] At the west end of the city there is also a theatre.

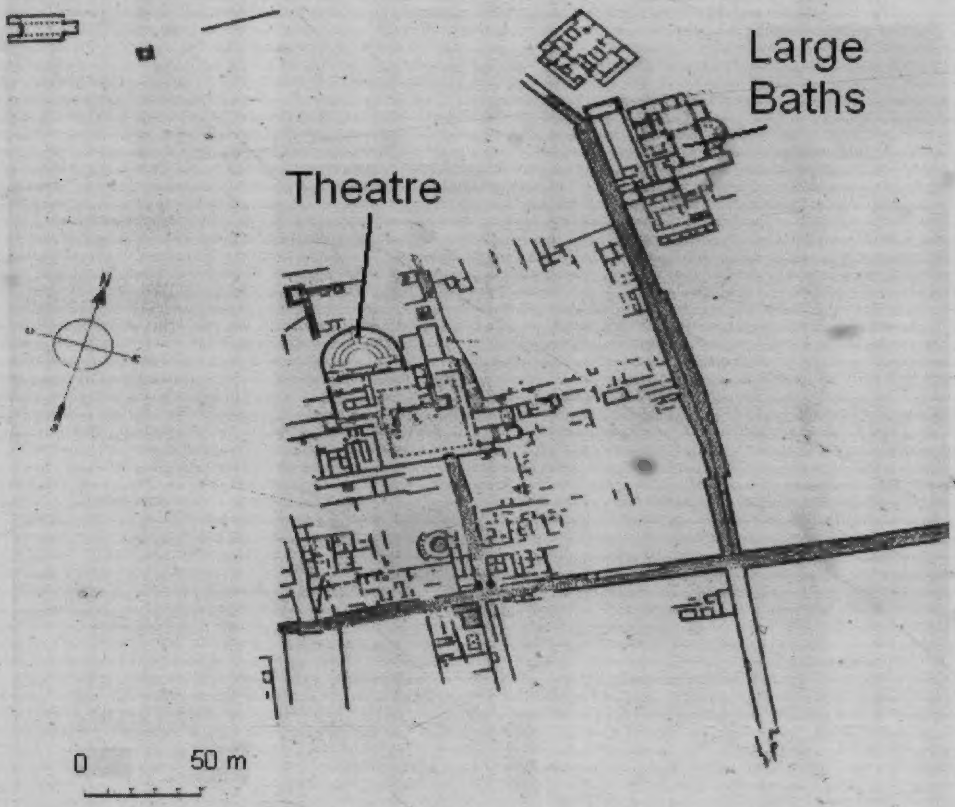

Figure A3.11.1

2) Description of *palaestra*

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[171] S. Gsell & C.A. Joly, *Khamissa, Mdaourouch, Announa, II: Mdaourouch* (Paris, 1922) p.94, Thébert (2003) p.215 and Romanelli (1970) p.184.
[172] Gsell & Joly (1922) p.95.

S. Gsell and C.A. Joly thought that the *palaestra* of the Large Baths was located between the baths and the street (Figure A3.11.2).[173] The main entrance to the baths lies 24 m east of the street. This hypothesized *palaestra* is poorly studied, in part because of all the late period construction that occurred, as well as the many graves that were placed there. What is known is that the area was higher in elevation than the baths, sloping east to the three steps in front of the entrance. The only other information gathered about this area was that is was open to the sky and may have had a portico running alongside the street. It is unclear however whether this portico was a part of a colonnaded street or a part of the *palaestra*. At the north end of the court there was a large cistern that supplied water to the baths. From here the space ran 34 m south to what has been identified as a small sanctuary dedicated to Mercury measuring 6.9 m by 6.05 m.[174]

After passing through the *palaestra* one entered the baths and could continue in two directions. Moving southwards one entered into a long corridor thought to be a changing room, which ultimately led to the latrines at the east end. A bather could also travel eastwards from the entrance into a large room measuring 16 m by 11.3 m. Gsell, Joly and Thébert all hypothesize that the function of this room was for exercise.[175] North of this room was the *frigidarium*, which contained a couple of pools. The heated rooms of the Large Baths were located in the west of the structure, separated from the so-called *palaestra* by a corridor and wall.

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[173] Gsell & Joly (1922) p.94 and Thébert (2003) p.215.

[174] Gsell & Joly (1922) pp.94-95. This would make the approximate total area of the *palaestra* around 600 m^2.

[175] Gsell & Joly (1922) p.94 and Thébert (2003) p.215.

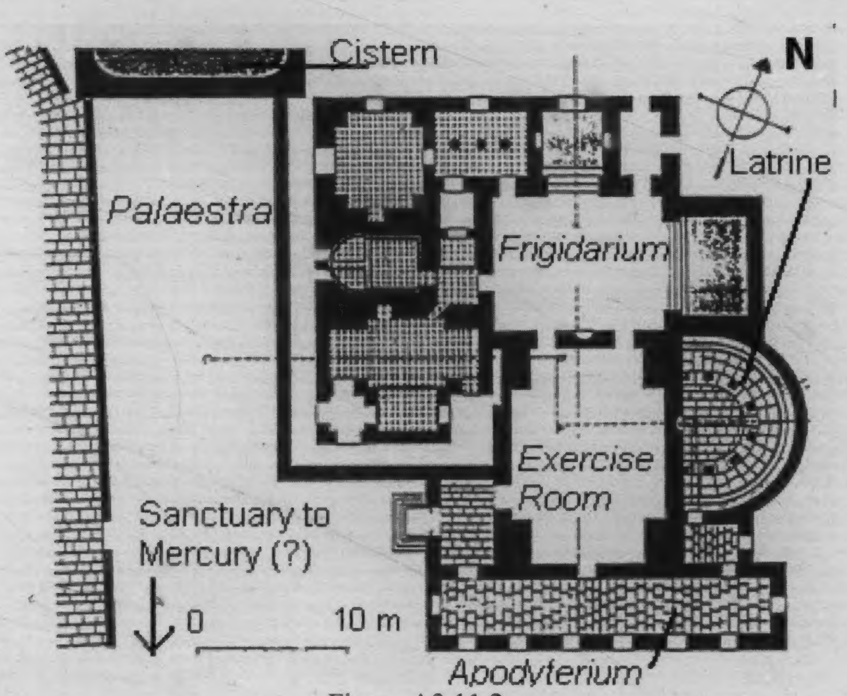

Figure A3.11.2

3) Artworks associated with the *palaestra*

Except for the funerary stele found in the so-called *palaestra* area, there are no artworks associated with it.

4) Date of *palaestra* and the bath

There are no inscriptions that give the initial construction date of the Large Baths at Madaurus. The style of the sculptures found in the baths, which are of deities, suggest that the baths were constructed during the reign of the emperor Septimius Severus. Thus the date of the baths can be placed sometime at the beginning of the 3rd century AD.[176] Three inscriptions found at Madaurus mention restorations done on a structure called the summer baths ([*therm*]*as aestivas*).[177] It is possible that further excavation will uncover another large bath building, which could turn out to be these summer baths, but until this time it seems likely that the Large Baths were called the summer baths during the Roman period. The inscriptions were from the latter half of the 4th and beginning of the 5th centuries AD.[178] Two other incomplete later inscriptions were also found, one in the Large Baths and the other nearby. Neither of these mentions what type of restoration work was done.[179] Eventually this structure ceased to function as a bath building and instead was remodeled into living quarters.[180]

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[176] Thébert (2003) pp.214-215 and Gsell & Joly (1922) pp.107-108.
[177] Thébert (2003) p.215.

5) Excavation Bibliography

Ballu, A., *BAC* (1907) pp.245-251
______ *BAC* (1908) pp.231-232
______ *BAC* (1913) pp.151-154
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Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.222
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.214-216

6) Textual evidence

There are no ancient literary accounts of the Large Baths at Madaurus.[181] There are some inscriptions, discussed above, that refer to restorations made to the baths.

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[178] *ILAlg*.1.2101-2102 and *ILAlg*.1.2108 respectively.
[179] *ILAlg*.1.2109 and *ILAlg*.1.2110.
[180] Gsell & Joly (1922) p.111.
[181] Apuleius, *Apologia* 24, Ptolemy, 4.3.7 and St. Augustine, *Confessions* 2.3.5 do mention the city however.

Inscriptions found in the Large Baths were dedicatory, either to a member of the Imperial family or some deity.[182] One of these latter inscriptions had additional information noting that a *gymnasium* was given (*gymnasio dato*).[183] Two other inscriptions, found at Madaurus but not in the Large Baths, also refer to a *gymnasium* being given.[184] There are many funerary inscriptions associated with the Large Baths at Madaurus that date to a later period when the structure was not utilized for bathing; however there are none that refer to the *palaestra*.[185]

12. (Near Mila): The Hammam Des Beni Guecha

1) Location/Urban context of *palaestra*

The baths of Beni Guecha are located in Algeria and are relatively isolated (Figure A3.12.1).[186] They lie near the Algerian town of Mila. The baths are at the rock buttresses of Bou-Cherf, which reach a height of 1,150 m.[187] The baths are situated at the end of a thermal water source, whose temperature ranges from 40 to 58° C and contains many different minerals. The baths are not entirely excavated but they appear to be rectangular and cover an area of more than 1,100 m².[188] Each side of the bath measures approximately 40 m and there also appears to be an extension east of the excavated area that may belong to the complex.[189] A *palaestra*-like structure was located in the south of the baths. There do not appear to be any other entertainment structures in the vicinity of these baths.

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[182] See Thébert (2003) pp.510-513 for all of the inscriptions found in, near or referring to the Large Baths at Madaurus. See also Lepelley (1981) pp.127-139 for some of these same inscriptions as well as a good selection of many other inscriptions found at Madaurus.

[183] *ILAlg*.2089 = *AE*, 1917-18.15. This inscription was found near the baths and not inside. See Appendix Four for the inscriptions.

[184] *ILAlg*.2130 = *AE*, 1919.44 was inscribed into a block that was found as a part of a fortress while the provenance for *AE*, 1931.41 is unknown.

[185] For a list and the text of these funerary inscriptions see A. Ballu, "Rapport", *BAC* (1913) pp.151-154.

[186] E. Albertini, *Khamissa, Mdaourouch, Announa, II: Mdaourouch* (Paris, 1922) pp.1-7.

[187] Vallet (1923-1924) p.197. More precise directions are given by Albertini (1925) pp.1-2.

[188] Thébert (2003) p.204.

[189] Vallet (1923-1924) pp.205-206.

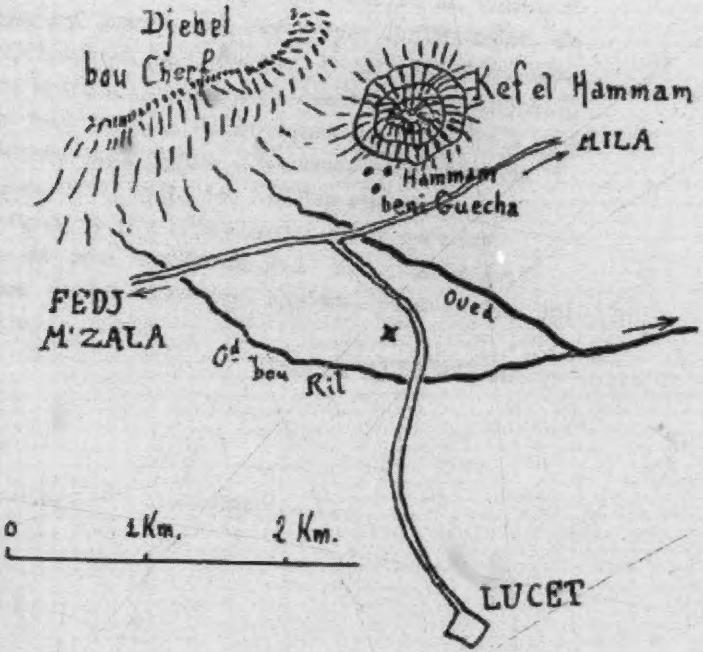

Figure A3.12.1

2) Description of *palaestra*

The *palaestra* is a large court measuring 22 m by 16 m and was framed by a portico on every side except the north (Figure A3.12.2).[190] On the east side of the court are 6 rooms measuring 3 m by 3 m each, while a seventh room at the north end measured 3 m by 4 m. The bases of pillars marked the south end of the court. The west side of the court has 5 rooms that measured 3 m by 3 m and are connected to one another. At the north end is another 3 m by 3 m room that was the latrine. To the north of the latrine is a seventh room that is 3 m by 4 m and led west to a semi-circular pool.[191] Y. Thébert suggests that all of the small 3 m by 3 m rooms were lodgings for those using the thermal waters because no other structures were located capable of providing the necessary accommodations.[192]

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[190] Vallet (1923-1924) p.204 and Thébert (2003) p.204.

The north side of the court is where the bathing rooms are located. The only access to these rooms is located in the northeast of the court. The door leads to a rectangular room measuring 13 m by 3 m and may have been a cloakroom.[193] To the north is a room with a pool, while west is another rectangular room measuring 9.8 m by 2.8 m with a small basin. Although the latter room borders the large court there is no access between the two areas. To the west is another rectangular room that is only partially excavated.[194] North of these three rectangular rooms are the pools, which were supplied by the thermal waters.

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[191] Vallet (1923-1924) pp.204-205.

[192] Thébert (2003) p.204. There is no evidence to support or refute this idea.

[193] Thébert (2003) p.205. Thébert hypothesizes that another access point from the court leading into the bathing area was in the northwest corner but more excavation is required in order to confirm this.

[194] Vallet (1923-1924) p.203 and Thébert (2003) p.205.

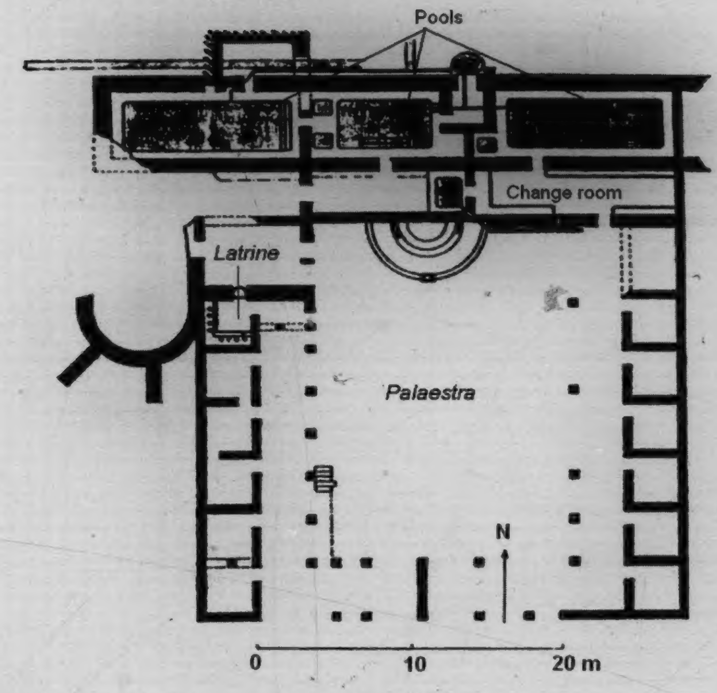

Figure A3.12.2

3) Artworks associated with the *palaestra*

None.[195]

4) Date of *palaestra*

The date of the baths at Hammam des Beni Guecha is unknown. Coins found at the site date to the late Roman period. Their presence only signifies that the baths were used later but do not give any indication of the date for the construction of the baths.[196] The layout of the baths appears to have been inspired by earlier Roman baths (1st century BC and AD), but this does not imply that they were constructed at that date.[197]

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[195] See Vallet (1923-1924) p.207 for a description of the coins, pieces of pottery and lamp found in the *palaestra*.

[196] Vallet (1923-1924) p.207.

[197] Thébert (2003) p.204. The Baths of Beni Guecha are similar in plan to early Roman republican baths, such as the Stabian Baths at Pompeii, in that they have a court that is surrounded by rooms on all sides.

5) Excavation Bibliography

Vallet, E., « Découverte d'un établissement thermal à Fdj M'zala » *RSC* 55 (1923-1924) pp.197-208
Albertini, E., *Khamissa, Mdaourouch, Announa, II: Mdaourouch* (Paris, 1922) pp.1-7
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.204-205

6) Textual evidence

None.

13. (Oued Athménia): Pompeianus Baths

1) Location/Urban context of *palaestra*

An Arab farmer ploughing his field in 1872 first discovered the Pompeianus Baths near Oued Athménia, in Algeria. The Pompeianus Baths, so-called because the name Pompeianus was found on one of the mosaics, are located in a rural setting and are isolated from any other ancient structures. Berthier estimated that the shape of the baths formed a square with each side measuring approximately 70 m.[198] However based on the plan one can see that the baths did not form a perfect square and thus these measurements must be revised. The area that is possibly a *palaestra* was in the northeast of the complex, where the principal entrance was located.

There has been much debate concerning the type of baths found at Oued Athménia. J. and P. Alquier called them *villa* baths because they interpreted some of the rooms east of the *frigidarium* as the *triclinium* (dining-room), *tablinum* (dining-room) and *oecus* (dining-room).[199] Berthier identified the area to the south and west of the baths as stables.[200] Although Y. Thébert believes that these were indeed *villa* baths he argues that the identification of these aforementioned rooms to the east of the *frigidarium* is incorrect. He notes that there are similarly shaped and designed rooms found in other baths throughout the Roman Empire but these are not identified as *triclinia* or *tablina*.[201] Only further excavation may reveal the function of these rooms, as well as that of the rooms to the south and west of the baths.

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[198] Berthier (1962-1965) p.9. Gsell (1901) p.23 gave a measurement of 800 m^2 for these baths, but this was an early estimate on a structure that was not completely excavated.
[199] Alquier (1929) pp.290-291. Poulle (1878) pp.449-451 similarly identified these rooms.

2) Description of *palaestra*

The northeast area of the baths was first thought to be an enclosed garden (Figure A3.13.1). However in 1929 J. and P. Alquier suggested that it was instead a court of some kind.[202] Further excavation determined that each side of the court measured 17 m, but the semi-circular pool to the southwest extended into the court and prevented the area from being completely square. The ground was never paved and it was hypothesized that there was a covered walkway around the edges of the court.[203] A Corinthian capital was discovered in the southwest corner of the court, but Christofle admits it may have come from a column found in the adjacent south room.[204] Thébert was the first to propose that this court was perhaps a *palaestra*.[205]

The entrance into the *palaestra* was at the north end where there is a paved section measuring 8 m by 3 m. At the south end of the *palaestra* was another door flanked by two pilasters that led into the rest of the baths.[206] Immediately south were many small rooms that have not been satisfactorily identified.[207] West of this area was the *frigidarium* and some cold pools, while the heated rooms of the baths were found in the south part of the structure.

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[200] Berthier (1962-1965) p.9.

[201] Thébert (2003) p.218. He believes that the themes of the mosaics in the baths verify that it was a rural setting.

[202] Alquier (1929) p.292.

[203] Alquier (1929) p.292, Christofle (1930 et 1933) p.103 and Berthier (1962-1965) p.11 all assumed that there was a peristyle around the court.

[204] Christofle (1930 et 1933) p.103.

[205] Thébert (2003) p.219.

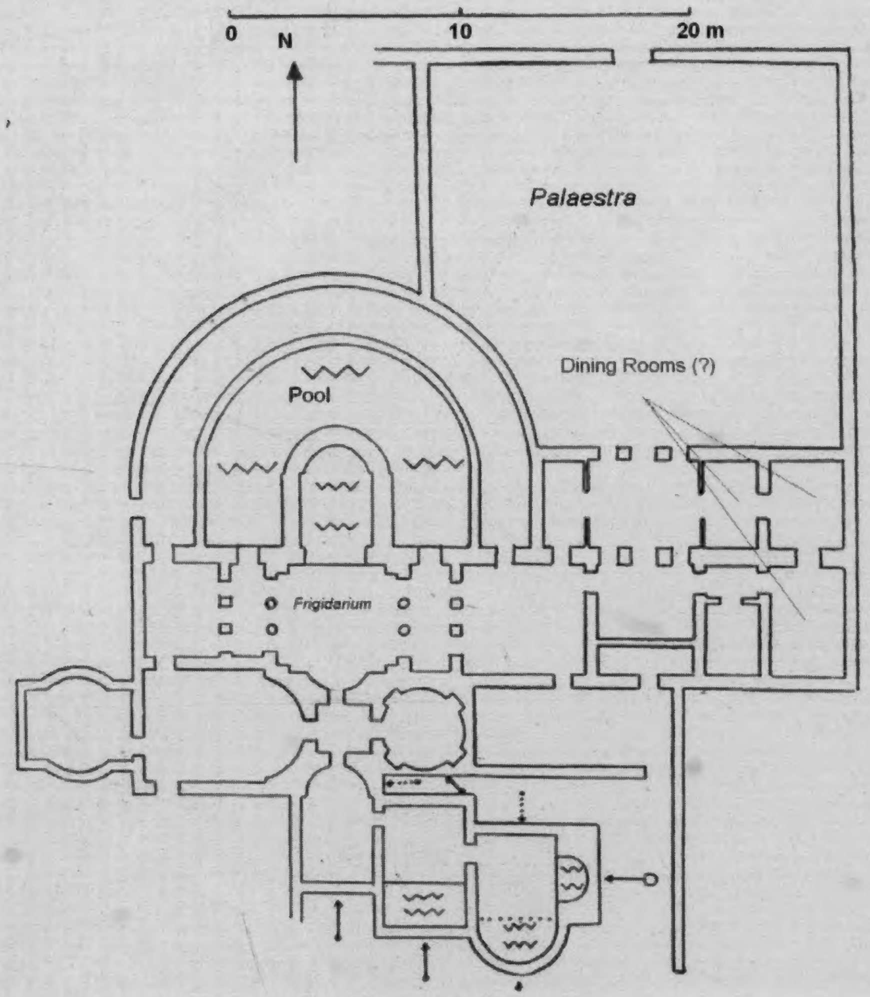

Figure A3.13.1

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[206] Berthier (1962-1965) p.11.
[207] Some of the rooms have been identified as an *oecus*, *triclinium* and *tablinum*. See above for discussion.

3) Artworks associated with the *palaestra*

The only item found in the so-called *palaestra* was a piece of marble in the center of the court measuring 2.58 m by 0.68 m and 0.26 m in height.[208] Besides its measurements nothing else is known about this piece of marble. J. and P. Alquier suggest that it could possibly be either the base of a statue or part of a bench.[209] Further study may give the function of this piece of marble.[210]

4) Date of *palaestra*

There is no evidence available to determine a construction date for the Pompeianus Baths. Y. Thébert feels that the style of the mosaics date to the end of the 4th or beginning of the 5th century AD.[211] He therefore suggests that these baths were constructed around the same time.

5) Excavation Bibliography

Poulle, A., « Les bains de Pompeianus », *RSC* 19 (1878) pp.431-454
Gsell, S., *Les monument antiques de l'Algerie*, II (Paris, 1901) pp.23-28
Alquier, J. et P., « Les thermes romains du Val d'or, près L'Oued-Athménia », *RSC*, 57, (1926) pp.81-118
______ « Les thermes romains du Val d'or, près L'Oued-Athménia », *RSC*, 59, (1929) pp.289-318
Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) p.224
Christofle, M., *Rapport sur les travaux de fouilles et consolidation effectués en 1927, 1928 et 1929, par le service des monument historiques de l'Algérie* (Alger, 1930 et 1933) pp.102-110
Berthier, A., « Établissements Agricoles Antiques a Oued-Athmenia », *BAA* 1 (1962-1965) pp.7-20
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) p.91

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[208] Christofle (1930 et 1933) p.103.
[209] Alquier (1929) p.292. The function of this piece of marble could be anything including an architectural piece of the baths
[210] Mosaics were found throughout the baths and published by Alquier (1929).
[211] Thébert (2003) p.218.

Thébert, Y., « Problèmes de circulation dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) pp.145-146
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) p.249
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.218-200

6) Textual evidence

None.

14. Sufetula (Sbeïtla): Large/Winter Baths

1) Location/Urban context of *palaestra*

The Large/Winter Baths at Sufetula (Sbeïtla) are located at the east end of the city (Figure A3.14.1) and are irregularly shaped. One enters the baths at the north end from the *decumanus maximus*. The baths were constructed using the *opus africanum* technique and cover an area of around 4000 m².[212] This area includes both the west and east baths, believed to be two distinct bathing complexes. The two separate baths suggest the possibility that one was for males and the other females. Thébert and Nielsen, however, suggest that perhaps they were winter and summer baths, since an inscription mentions that the pool of the winter baths was restored.[213] Whatever the case, both baths shared a single entrance and a single *palaestra*, aligned north to south. There was a theatre immediately behind the baths. Sufetula also had an amphitheatre at the west end of the city.

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[212] Nielsen, vol.2 (1990) p.28 and L. Poinssot, « Rapport sur l'emploi fait par le Service des antiquités de la subvention accordée au dit Servie en 1920 » *BAC* (1921) p.LIX.
[213] Thébert (2003) p.154 and Nielsen, vol.2 (1990) p.28. As the difference between summer and winter baths is still very unclear, it is difficult to determine which side was which. See Yegül (1992) p.43 for comment on this difficulty in determining between the two types of baths.

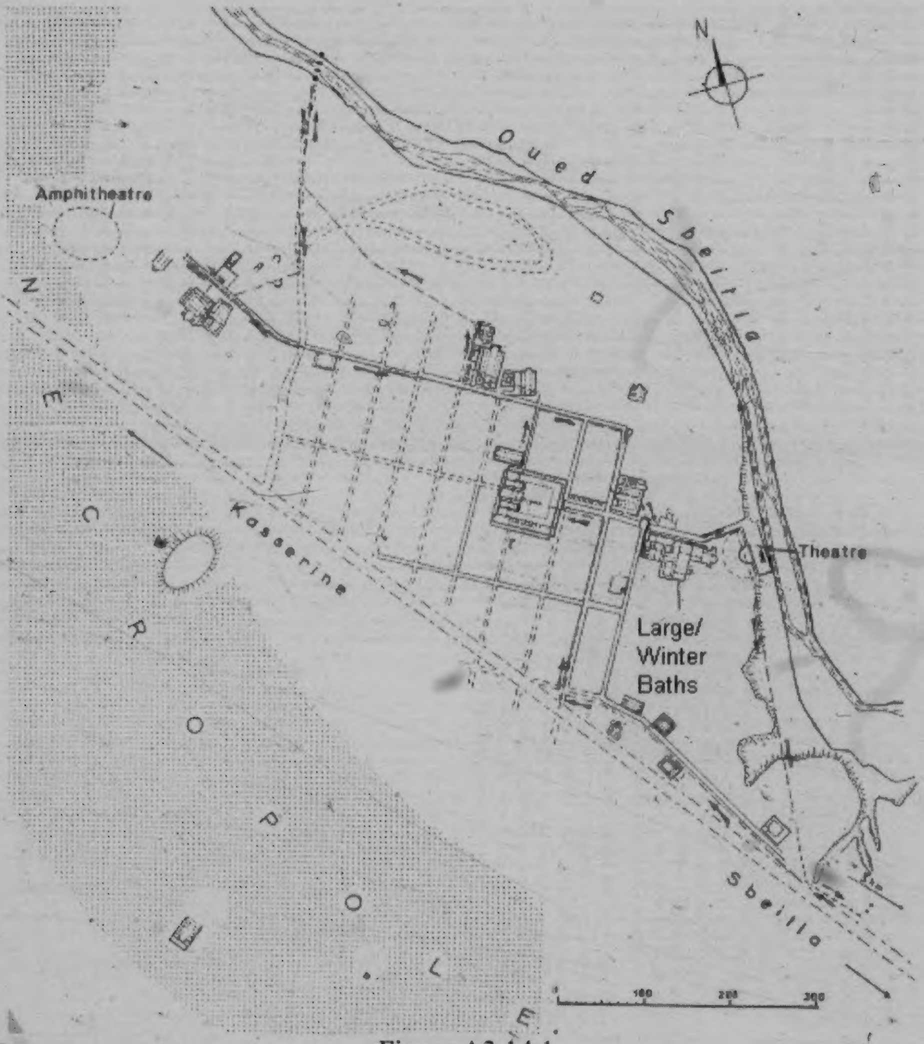

Figure A3.14.1

2) Description of *palaestra*

The baths are entered from the north and flanking the entrance are two columns (Figure A3.14.2). Inside the entrance is a small room which gives way westwards into another larger room, presumably a foyer. This room provided access into both the west and east bathing rooms. From here a bather could continue southwards to reach the *palaestra*, passing through yet another rather large room. This second larger room was transformed at a later date into a *frigidarium*, with two accompanying pools, but it was initially believed to be another foyer that provided access to corridors servicing the heated rooms of the west, smaller baths. Thébert believes however that this second larger room should be considered as the primary access point into the east baths.[214]

The *palaestra* is at the south end of the baths, measuring 27 m by 17 m and was surrounded on all four sides by columns. The central space measures 17 m by 7.5 m and is open to the sky, while the walkways were 4.5 m deep. Mosaics paved the floor of the walkways; as well they were in between the columns.[215] At each corner of the central area was a large pillar, while a colonnade of five double columns were on the long sides and a colonnade of two double columns were on the short sides. Some of the columns were raised on bases and barrel vaults likely covered the walkways. Stone benches lined the walls around the *palaestra*.[216]

The north door of the *palaestra* led to the aforementioned foyer, later transformed into a *frigidarium* with two cold pools. A door along the east wall of the *palaestra* led into the *frigidarium* of the east baths. At the south end of this *frigidarium* was a large pool. The west side of this pool has two passages leading directly into the *palaestra*. A door on the west side of the *palaestra* leads to an unexcavated area that presumably was a part of the west baths.

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[214] Thébert (2003) p.154.

[215] N. Duval et F. Baratte, *Les ruines de Sufetula-Sbeïtla* (Tunis, 1973) p.84. Thébert (2003) p.155 however states that the court was also paved.

[216] Duval et Baratte (1973) pp.82-85, Yegül (1992) p.400 and Thébert (2003) p.155.

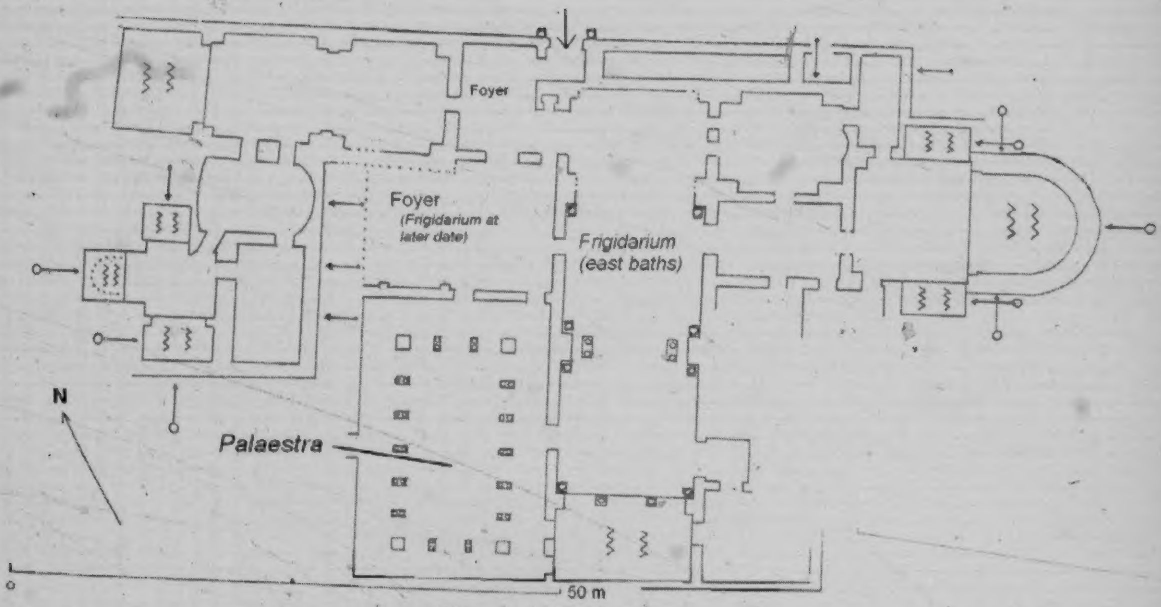

Figure A3.14.2

3) Artworks associated with the *palaestra*

The only artworks associated with the *palaestra* in the Large Baths at Sufetula were the black and white mosaics that paved the walkways behind the colonnades.[217]

4) Date of *palaestra*

The baths appear to have been two separate structures but it is not clear which side was constructed first. Therefore any date given to the baths is applied to both structures. This date is thought to be sometime during the 3rd century AD. This is based primarily on the architecture of the structure and an inscription from the base of a statue found in the wall of the room nearest the entrance of the baths.[218] The inscription is a dedication to L. Valgius Fortis Carpentius. The problem with using this for dating the baths is the question of when the inscription was placed in the room. The inscription could have been supporting a statue in a niche or it could have been re-used as part of the masonry.[219] Another inscription found in the wall of one of the cold pools in the *frigidarium* dates to AD 283 and supports the 3rd century date.[220] Whatever the construction date was for these baths it appears that they were restored sometime in the early 4th century.[221]

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[217] L. Poinssot et R. Lantier, « Rapport sur les fouilles exécutées à l'aide de fonds attribués par le Ministère de l'instruction publique au Service des antiquités et des arts de la Tunisie » *BAC* (1923) p.CXLIX.
[218] Thébert (2003) p.153 and *ILAfr*.139. See # 1, in the Sufetula part of section one in Appendix Four.

5) Excavation Bibliography

Merlin, A., *BAC* (1917) pp.CXLII & CXCVII-CXCIX
______ *BAC* (1920) pp.XXXIII
Poinssot, L., « Rapport sur l'emploi fait par le Service des antiquités de la subvention accordée au dit Servie en 1920 » *BAC* (1921) pp.LV-LXIII
Poinssot, L. et Lantier, R., « Rapport sur les fouilles exécutées à l'aide de fonds attribués par le Ministère de l'instruction publique au Service des antiquités et des arts de la Tunisie » *BAC* (1923) CXLVIII-CLVII
Poinssot, L. et Lantier, R., *BAC* (1923) pp.CXXVII-CXXVIII
______ *BAC* (1925) pp.XXVIII-XL
Picard, G., « Rapport sur l'activitié du Service des antiquités de la Tunisie dans le second semestre 1946 » *BAC* (1946-1949) pp.215-230
Duval, N., & Baratte, F., *Les ruines de Sufetula-Sbeïtla* (Tunis, 1973) pp.82-86
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.91-92 & 139-140
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.153-156

6) Textual evidence

None. A fragmentary inscription was uncovered in one of the rooms mentioning the Winter Baths (*thermarum hiemalium*).[222] This is why the baths are sometimes referred to by that name. Besides this, a few inscriptions were uncovered that referred to some of the features within the baths, such as one of the pools and the hot room

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[219] Thébert (2003) p.153. Nowhere in the text is there any mention of a bath as well.
[220] Poinssot et Lantier, *BAC* (1923) p.CXXVII.
[221] *ILAfr*.141 = *AE*, 1921.30, and Thébert (2003) p.494 # 42.
[222] *ILAfr*.141 = *AE*, 1921.30. See # 2, in the Sufetula part of section one in Appendix Four.

(*caldarium*).[223] There are also a few dedicatory inscriptions that make no mention of the baths but are important for establishing the construction dat[illegible]f the structure.[224]

15. Thamugadi (Timgad): Filadelfis Baths

1) Location/Urban context of *palaestra*

The Filadelfis Baths are located in the suburbs of Thamugadi (Timgad), at the northern limit of the city and not far from the Large North Baths (Figure A3.15.1). They are rectangular in shape, measure 61 m by 38 m and were constructed using *opus testaceum*.[225] The main entrance is at the south end of the baths and leads directly into the *palaestra*. The cold rooms are in the middle of the baths while the hot rooms are at the north end. Ballu suggested that the Filadelfis Baths were private because of the high quality of artwork.[226] There are other baths in Thamugadi that possess a *palaestra*, such as the Large South Baths, the Sertius Baths, and the Large East Baths. There is also a theatre located at the south end of the city inside the Roman fort.

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[223] *ILAfr*.141 = *AE*, 1921.30 for the pool and *ILTun*.371 for the hot room.

[224] See above for the inscriptions and the discussion on their use for dating the baths.

[225] S. Germain, *Les mosaiques de Timgad* (Timgad, 1969) p.74. Nielsen (1990) v.2, p.31 gives a smaller area of the baths of 1650 m^2 but does not offer the reason why.

[226] A. Ballu, *Les ruines de Timgad antique Thamugadi. Sept annee de decouvertes* (Paris, 1911) p.108.

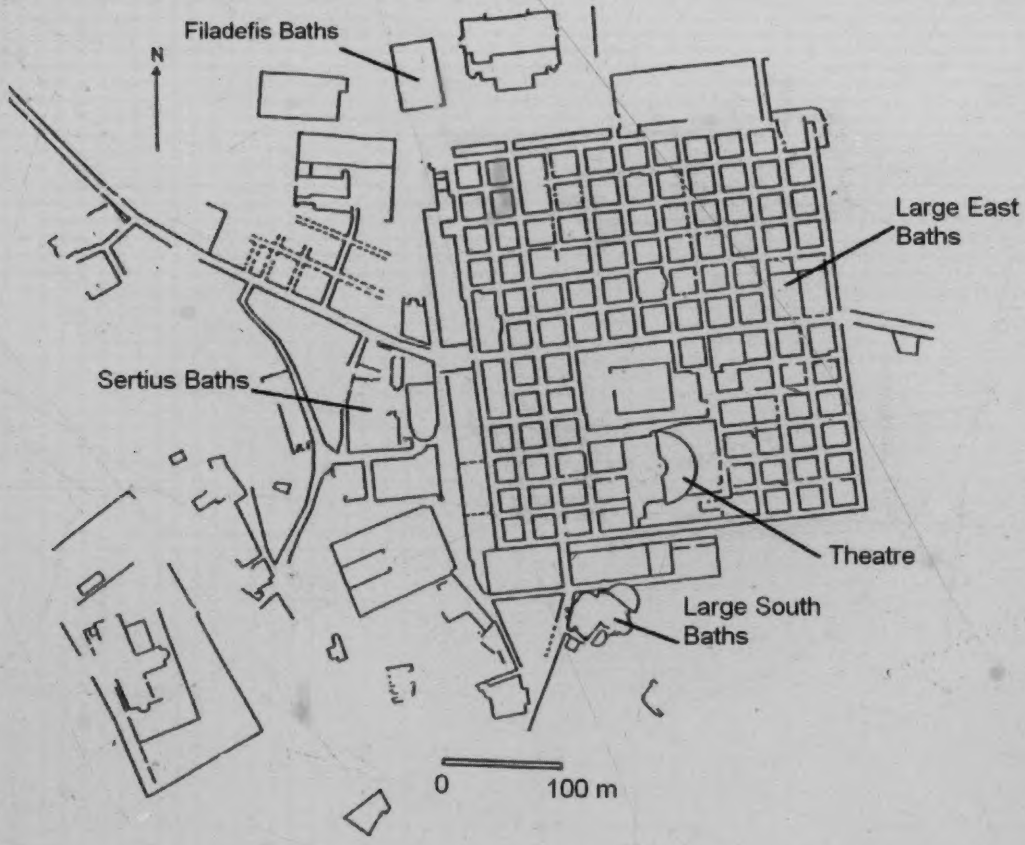

Figure A3.15.1

2) Description of *palaestra*

A colonnaded street runs along the south side of the baths (Figure A3.15.2). One enters and descends five steps into the *palaestra*, which is to the left and measures 30 m by 15 m and is surrounded by a portico on all four sides. The portico is paved with mosaic and is 1 m wide from the wall to the level of the court. The bases of the columns still remain around the court and from the middle of one column to the middle of another measure 1.9 m apart. At the east end of the court there was a pool that measured 14 m by

3.75 m and was likely for swimming. The remains of a drain lie 3.5 m from the west wall of the *palaestra*, which took water away from the baths.[227] Alterations were made later to this area including a wall in the north with 5 column bases.[228]

To the right of the entrance is a rectangular room measuring 13 m by 4.2 m and there are remains of some black and white mosaics.[229] Thébert suggests this room could be a gymnasium, but there is no evidence to suggest its function.[230] At the north side of the *palaestra* are four steps leading down into a long corridor, 15.3 m by 3.18 m, and this was possibly a change room. The corridor was paved with mosaic and connected to the *frigidarium*, which had a single cold pool.[231] North were the hot rooms and in the northeast and northwest corners were the latrines for the baths.

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[227] A. Ballu, *BAC* (1905) pp.91-95, Ballu (1911) pp.101-103, A. Ballu, *RSC* (1922-23) pp.52-53 and Thébert (2003) p.236. Yegül (1992) p.237 gives the measurements of the pool at 6.5 m by 3.7 m and Ballu (1911) p.101 measures it at 10 m by 6 m. There are no reasons given to why there is such a discrepancy between all three authors.

[228] Ballu, *RSC* (1922-23) p.52 gives no explanation for the purpose of this alteration.

[229] Germain (1969) p.75.

[230] Thébert (2003) p.236,

[231] Ballu, *BAC* (1905) pp.91-95 and Thébert (2003) p.237.

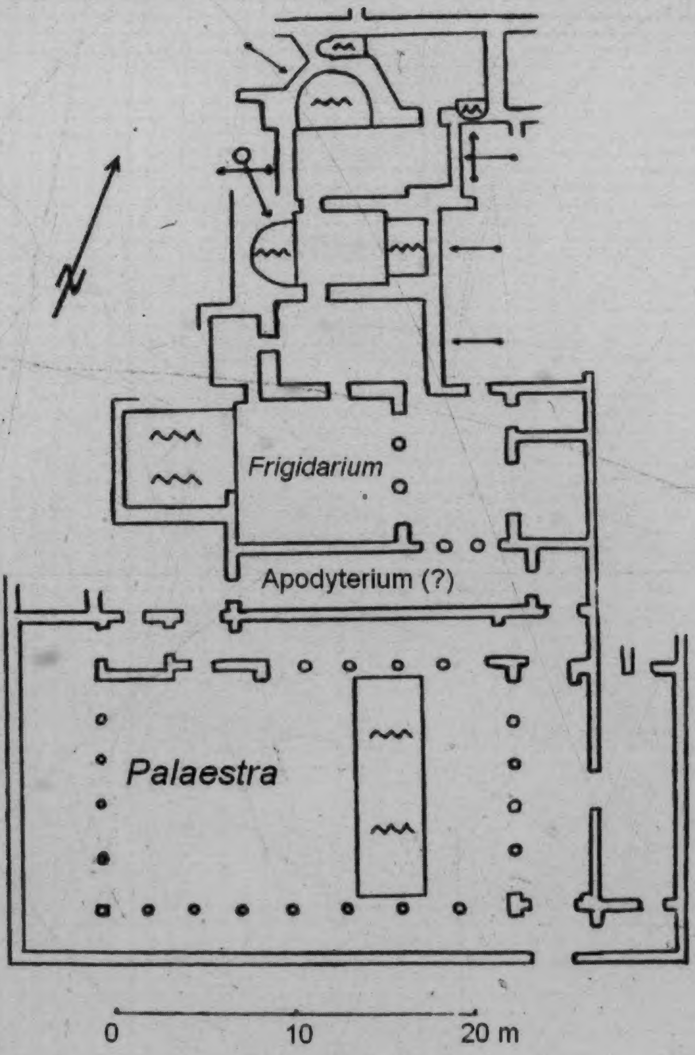

Figure A3.15.2

3) Artworks associated with the *palaestra*

Numerous mosaics were uncovered within the Filadelfis Baths, including some in the *palaestra*. Those in the *palaestra* have polychrome geometric designs, and they are located under the portico. Germain believes that the design for these mosaics may be from a later period.[232]

4) Date of *palaestra*

The Filadelfis Baths are dated to around the end of the 2nd or the beginning of the 3rd AD. Germain bases this date on the style of mosaics within the baths. She notes that not all of the mosaics are preserved, meaning that if there were earlier mosaics they no longer exist.[233] Thébert suggests that all the black and white mosaics could be attributed to the Severan period except for the figured scene in one of the heated rooms, which was likely added later.[234]

5) Excavation Bibliography

Ballu, A., *BAC*, (1905) pp.91-95
______ *BAC*, (1906) p.197
Schulten, A., *AA* (1906) col.162
Ballu, A., *Les ruines de Timgad antique Thamugadi. Sept annee de decouvertes* (Paris, 1911) pp.101-109
______ *RSC* 54 (1922-23) pp.51-53
Courtois, C., *Timgad, antique Thamugadi* (Alger, 1951) p.87
Germain, S., *Les mosaiques de Timgad* (Timgad, 1969) pp.74-80
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) p.95
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) p.237
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.236-237

6) Textual evidence

None. There were mosaics in the northernmost room of these baths containing a few Latin words, but these are irrelevant with regards to the *palaestra*. The most significant one reads *Filadelfis vita* and was placed above the mosaic located in the centre of this unidentified room. It is this text that gives these baths the name of Filadelfis.[235] There is an inscription found in the Byzantine fortress mentioning a bath with a large pool surrounded by a bronze balustrade, a garden with a portico and a pronaos (porch) with a portico dating to the Severan period, but this bath has not been uncovered and the inscription does not refer to the Filadelfis Baths.[236] An inscription mentioning a *gymnasium* dating around AD 198 to 211 was also found in the city of Thamugadi.[237]

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[232] Germain (1969) pp.74-75.
[233] Germain (1969) p.80.
[234] Thébert (2003) p.236.

16. Thamugadi (Timgad): Large East Baths

1) Location/Urban context of *palaestra*

The Large East Baths at Thamugadi (Timgad) are located at the east side of the city within the walls of the Roman fort (Figure A3.15.1). The baths are not symmetrical and the south side is adjacent to the *Cardo Decumanus*. The baths were constructed using the *opus testaceum* technique and cover an area of between 1000 m and 1500 m².[238] The supposed *palaestra* is located in the southeast corner and its entrance opens onto the main street. The remaining rooms, both hot and cold, are in the west half of the structure. Thamugadi has other baths with *palaestrae*, including the Large South Baths, the Sertius Baths and the Filadelfis Baths. The city also has a theatre located to the southwest of the Large East Baths.

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[235] Ballu (1911) pp.105-107. The other Latin texts from this room includes *Saluu*(*m*) *lotu*(*m*) and *B*(*onis*?) *B*(*ene*?). See Thébert (2003) p.516 #170 for the discussion on these two other texts.

[236] *CIL*, 8.2369, 2370. See Thébert (2003) p.519 nº 183 for a short discussion on this inscription. See # 1, in the Thamugadi, Filadelfis Baths, part of section one in Appendix Four.

[237] *AE*, 1941.46 was found at the base of a limestone moulding. See also L. Leschi, *Études d`épigraphie, d`archéologie et d`histoire africaines* (Paris, 1957) pp.227-228.

[238] Depending upon what rooms one considers to be a part of the baths the total area is different. A. Ballu, *Les ruines de Timgad antique Thamugadi. Nouvelles decouvertes* II (Paris, 1903) p.59 calculates the area at 1500 m² while Thébert (2003) p.230 excludes the northeast wing and the *palaestra* area, and therefore calculates the total area of the baths at 1000 m².

2) Description of *palaestra*

The main entrance into the Large East Baths is located at the south and leads directly into the area thought to be the *palaestra* (Figure A3.16.1). The room measures 10.3 m by 10.83 m.[239] One first enters into a small gallery running along the south wall. This opens northwards onto the *palaestra*, eastwards towards a latrine and westwards into a room, which connects to a change room and the furnace area. The latrine runs northwards along the east side of the *palaestra*. Two other galleries flank the court, one to the north and the other to the west. All of these galleries connect to one another and were paved with mosaic, while benches still remain in the west gallery.[240] D. Krencker believes that the galleries were at one time a colonnaded peristyle, but later were transformed into walled galleries.[241] Thébert does not find any evidence to suggest that the *palaestra* was covered, even though this was initially believed.[242]

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[239] Ballu (1903) p.54, n.2.

[240] See Ballu (1903) p.54 for the measurements of these rooms. Krencker (1929) p.227 and Thébert (2003) p.231 note that benches were found around this area.

[241] Krencker (1929) p.227. This idea is similar to what had happened to the *palaestra* in the Large North Baths in Volubilis. See the section on Volubilis for details.

[242] Thébert (1991) p.142.

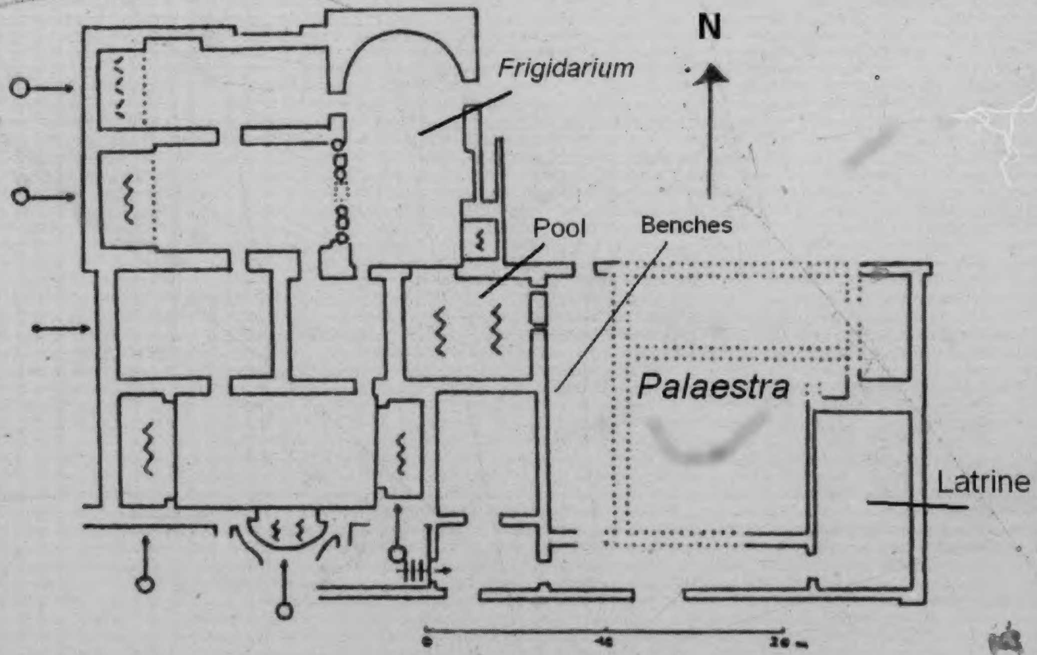

Figure A3.16.1

The area to the north of the north gallery is poorly preserved and difficult to understand, and Thébert questions whether the rooms here actually belonged to the baths (Figure A3.16.2).[243] In the northwest corner of the *palaestra* was an opening connecting to a cold pool measuring 7.1 m by 5.9 m. This door was eventually blocked. The *frigidarium* is north of the cold pool and was only accessible from the northeast. This would suggest some sort of connection must have existed between here and the *palaestra*, making the rooms in the northeast a part of the overall structure. All the hot rooms are located in the west part of the baths.

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[243] Ballu (1903) p.55 mentions that they are underground.

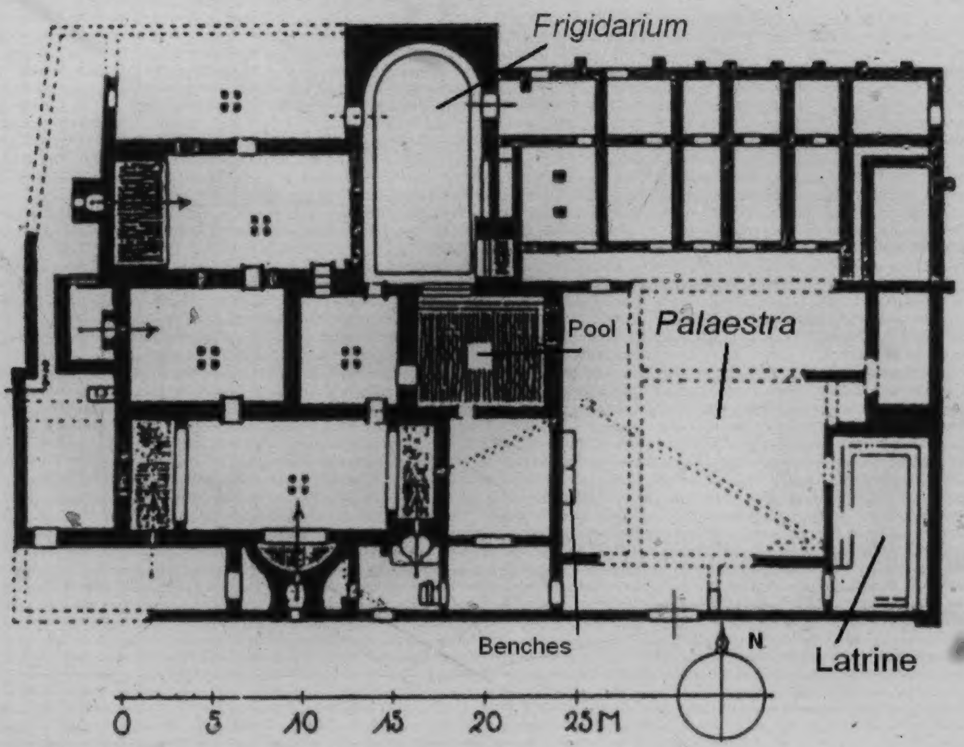

Figure A3.16.2

3) Artworks associated with the *palaestra*

The galleries around the *palaestra* area were all paved with mosaic; however there are not enough pieces to indicate the design.[244]

4) Date of *palaestra*

The construction date is suspected to be during the first half of the 2nd century AD because of an inscription, found inside the baths, stating that the baths were increased in size. This inscription is dated to around AD 167 or 168 under the reign of Marcus

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[244] Germain (1969) p.33. E. Boeswillwald, R. Cagnat, et A. Ballu, *Timgad, une cité africaine sous l'empire romain* (Paris, 1905) p.293 noted that graffiti showing racehorses covered the walls of the large pool.

Aurelius and Lucius Verus.[245] Further alterations to the baths continued afterwards. Thébert notes that some of the mosaics in the baths were added later, possibly during the first half of the 3rd century.[246]

5) Excavation Bibliography

Ballu, A., *Les ruines de Timgad antique Thamugadi. Nouvelles decouvertes* II (Paris, 1903) pp.54-59

Ballu, A., *BAC* (1903) pp.CLXXIV-CLXXV

______ *BAC* (1905) p.86

Boeswillwald, E., Cagnat, R. et Ballu, A., *Timgad, une cité africaine sous l'empire romain* (Paris, 1905) pp.288-293

Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.227-228

Courtois, C., *Timgad, antique Thamugadi* (Alger, 1951)

Germain, S., *Les mosaiques de Timgad* (Timgad, 1969) pp.33-36

Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.91-93

Thébert, Y., « Problèmes de circulation dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) pp.142-143

Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.231

6) Textual evidence

There are no accounts of the Large East Baths or its *palaestra* in the ancient literary record. A single inscription found in the baths provides clues to dating.[247] The only other significant inscriptions include a *gymnasium* inscription and the inscription found in the Byzantine fortress; but neither refers to the Large East Baths.[248]

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[245] A. Ballu, *BAC* (1903) pp.58-59. See # 1, in the Thamugadi, Large East Baths, part of section one in Appendix Four.

[246] Thébert (2003) p.230.

[247] Ballu (1903) pp.58-59. Another inscription was found in the baths but it was a funerary stele. See Ballu (1903) pp.57-58 for text of this inscription.

[248] For the *gymnasium* inscription see footnote 237. For the inscription in the Byzantine fortress see the dating section of the Filadelfis Baths at Thamugadi.

17. Thamugadi (Timgad): Large South Baths

1) Location/Urban context of *palaestra*

The Large South Baths at Thamugadi (Timgad) are located at the south end of the city and are asymmetrical (Figure A3.15.1). They cover an area of 2000 m², which includes the semi-circle to the north, and are constructed using *opus testaceum* and *opus quadratum*.[249] The baths lie at a crossroads of two large streets. The *Cardo Maximus* runs north to south along the west side of the baths and the Street of the Baths runs along the northwest side. There are five entrances into the baths, two in the north and three in the south. The first *palaestra* is located inside the baths on the east side, while a second, later *palaestra* is situated in the northeast. The cold and hot rooms are located in the west half of the baths; the east side also has a latrine and a semi-circular room. There are other baths in Thamugadi that possess a *palaestra*, such as the Filadelfis Baths, the Sertius Baths and the Large East Baths. There is also a theatre 74 m away located at the south end of the city inside the Roman fort.[250]

2) Description of *palaestra*

The main complex of the Large South Baths had two entrances, one in the south and one in the north (Figure A3.17.1). Entering from the north led into a corridor, which gave access to three different rooms. The first room, in the northeast corner, was very small. Next to this room was an exedra with two columns at the entrance with some geometric mosaics and an animal mosaic on the floor.[251] On the other side of the corridor was a long rectangular room measuring 9 m by 24 m. The south entrance of the Large

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[249] Germain (1969) p.132 and A. Ballu, *Les ruines de Timgad antique Thamugadi* (Paris, 1897) p.188. Thébert (2003) p.240 does not include this area and thus has a total of 1800 m².
[250] Ballu (1897) p.170.
[251] For the specifics of these rooms see Boeswillwald *et alii* (1905) p.227.

South Baths also led into a corridor (the same one), which gave access to the furnace area to the west and the latrine to the east.[252] Continuing north a bather would reach this same 9 m by 24 m rectangular room. Thébert suggests that this room was used for exercise when the baths were first constructed. [253] This argument is based on the evidence that the room was divided into three spans by pilasters, which likely carried beams.[254] It would not be hard to believe that columns once surrounded the room and were then altered to support a roof. This room was the typical location for a *palaestra*, as it was on the east side of the baths, had immediate access to a pool and was near the *frigidarium*.

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[252] It is possible that the south entrance was primarily used to access the latrine and the furnace areas, thus preventing those bathers in the rooms to the north from being disturbed.
[253] Thébert (2003) p.241. Although they were covered he believes that were initially open to the sky.
[254] Ballu (1897) p.180, Boeswillwald *et alii* (1905) p.227, Krencker (1929) p.229 and Thébert (2003) p.241.

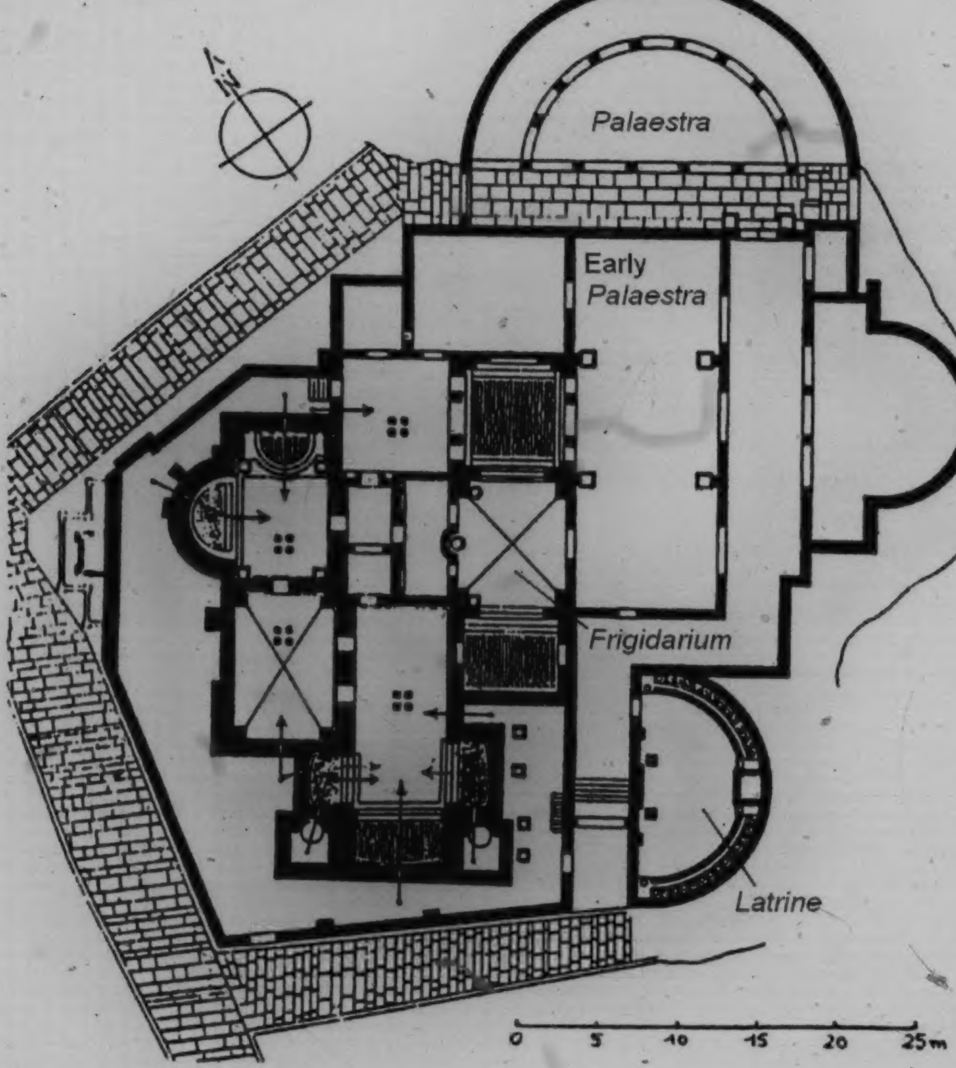

Figure A3.17.1

Although this was likely a *palaestra* at one time, its design changed and it is this later arrangement that will be described. However, in order to differentiate it from the *palaestra* in the north of the baths, this space will be referred to as the interior *palaestra*. There were three entrances 2.95 m wide along the east wall connecting to the corridor, as well as a smaller entrance at the south end of the room. It had four pilasters and in front of each was a pedestal where a statue was placed. This room was divided into three sections and the floor was paved with mosaics. Besides the service corridors, this room was the principal area from which a bather could enter into the rest of the baths. In the northwest corner was a door connecting to a 7.9 m by 9.8 m room suspected to be a change room. In the middle was access into a cold pool measuring 6.15 m by 6.05 m, and the south end of this interior *palaestra* opened into the *frigidarium* measuring 8.3 m by 7.1 m.[255]

The later *palaestra* in the Large South Baths was located at the north end. It is unclear whether this area was a part of the original construction of the baths or a later addition.[256] The reason for this assumption is that the street of the baths along the northwest side runs through the baths, separating the *palaestra* from the rest of the structure. If the *palaestra* was a late addition it would explain why it was placed on the other side of this street. There were two entrances into this semi-circular *palaestra*, one on the west and one on the east side. The area was around 10 m wide and 25 m long with a covered portico. It had 8 columns around the semi-circle and 6 columns running along the front.[257] There was also a door along the south wall that led into the main baths.

3) Artworks associated with the *palaestra*

There were many different forms of artwork found in the Large South Baths. Nothing was present in the north *palaestra*, but artwork was found in the interior *palaestra*. The artworks found in the latter decorated the room after its function changed. There were four pedestals, each possessing an inscription indicating what sculpture stood on it. The emperor Valerian and the wife of Gallienus, Cornelia Salonina, were on the two east pedestals, while the two sons of Gallienus resided on the west pedestals.[258] On the floor is a black and white geometric mosaic.[259] Symbols present on one of the mosaics also suggest that the baths had ties to entertainment clubs as well.[260]

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[255] Ballu (1897) p.183 and Boeswillwald *et alii* (1905) p.233.
[256] This is in reference to the restoration that occurred in AD 198.
[257] Ballu (1897) p.176 and Thébert (2003) p.241.

4) Date of *palaestra*

The Large South Baths underwent many changes, some of which are datable. The date for its initial construction is not certain, but it was sometime in the 2nd century AD because in AD 198 more rooms were added to the baths (*thermas ampliatas*).[261] The inscription mentioning this did not specify what was exactly added but Ballu, Krencker and Thébert all suggest that the hemicycle in the north is the likely candidate.[262] Redecoration occurred in the mid-third century when new sculptures were placed throughout the baths dedicated to the emperors Valerian, Gallienus and the latter's sons.[263] Another inscription states that the baths were again restored sometime in the late empire. The inscription was placed facing the semi-circular *palaestra* at the north end.[264]

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[258] Boeswillwald *et alii* (1905) p.227.

[259] Germain (1969) p.135. The geometric motif in this room is also found on the mosaics in the *frigidarium* and the corridor to the east. See Germain (1969) for a description of the other mosaics found in the Large South Baths.

[260] Thébert (1991) pp.193-204.

[261] *AE*, 1894.44. See Appendix Four, under the Large South Baths of Thamugadi (# 1) for this and other inscriptions from this bath. Another inscription (# 7) placed around the same time was found on the base of a statue from Crispina, the wife of Commodus in one of the hot rooms: *CIL*, 8.2366. See Thébert (2003) p.518 nº 181 and Boeswillwald *et alii* (1905) pp.244-245 for more discussion on this inscription.

[262] Ballu (1897) p.174, n.4, Krencker (1929) p.228 and Thébert (2003) p.240.

[263] See #'s 3, 4, 5, 6 & 8 in the Thamugadi, Large South Baths, part of section one in Appendix Four.

[264] Another inscription was found in the *frigidarium* that dated to the late empire as well, around the 4th century AD. See Thébert (2003) p.517, nº 175 and Boeswillwald *et alii* (1905) pp.235-236 for the discussion of this inscription. See also # 2 in the Thamugadi, Large South Baths, part of section one in Appendix Four.

According to S. Germain a mosaic in one of the west rooms is dated to the 5th century indicating that the Large South Baths were used for a long time.[265]

5) Excavation Bibliography

Ballu, A., *Les ruines de Timgad antique Thamugadi* (Paris, 1897) pp.170-188
Gsell, S., *Les monument antiques de l'Algerie*, I (Paris, 1901) pp.221-224
Ballu, A., *BAC* (1905) pp.88-89
Boeswillwald, E., Cagnat, R., et Ballu, A., *Timgad, une cité africaine sous l'empire romain* (Paris, 1905) pp.217-257
Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.228-231
Courtois, C., *Timgad, antique Thamugadi* (Alger, 1951) pp.55-60
Germain, S., *Les mosaiques de Timgad* (Timgad, 1969) pp.132-136
Romanelli, P., *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) p.186
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.90-93
Thébert, Y., « Problèmes de circulation dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) p.143
______ « Les sodalités dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) p.202
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.231-234
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.240-242

6) Textual evidence

None. The baths do possess a significant number of inscriptions useful for dating the various stages of building and decoration and these are discussed in the relevant section above. The only other significant inscriptions include a *gymnasium* inscription and the inscription found in the Byzantine fortress; but neither refers to the Large South Baths.[266]

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[265] Germain (1969) p.136.

[266] For the *gymnasium* inscription see footnote 237. For the inscription in the Byzantine fortress see the dating section of the Filadelfis Baths at Thamugadi.

18. Thamugadi (Timgad): Marché De Sertius Baths

1) Location/Urban context of *palaestra*

The Sertius Baths at Thamugadi (Timgad) are in the west end of the ancient city, just outside the west wall of the Roman fort (Figure A3.15.1). They are rectangular in shape measuring 34 m by 40 m and built using *opus testaceum*.[267] The suspected *palaestra* is located at the east end of the baths. The *Forum Vestiarum* is located to the northeast and the markets of Sertius to the west of the *palaestra*. At the west end of the baths is a north-south road, while to the north and south of the baths are other buildings.[268] There are other baths in Thamugadi with *palaestrae*, such as the Large South Baths and the Filadelfis Baths, and the Large East Baths. There is also a theatre located in the south part of the Roman fort.

2) Description of *palaestra*

The *palaestra* in the Sertius Baths abuts and gives direct access to the *Forum Vestiarum* to the north and the Sertius market to the east (Figure A3.18.1). This area seems to be the primary entrance into the Sertius Baths even though there appear to be access points on the west side.[269] The *palaestra* is approximately 23 m by 15 m and although not much remains, there is a pool with a few steps still visible on the west side.[270] Initially A. Ballu believed this pool was a part of the *frigidarium*, but Thébert rightly argues that it is separate from that room and should instead be considered as a part of the *palaestra*.[271] Two large doors at the north end of the west side lead into the *frigidarium*. There is a portico that runs north to south along the east side of the *palaestra*. This portico runs north up to the *Forum Vestiarum*, but continues past the baths joining ~~other~~ columns south of the baths.[272] Not much else is known regarding the *palaestra*.

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[267] Ballu (1911) p.127. Thébert (2003) p.239 estimates that the total area is just over 1000 m². He includes the large north unidentified area of the baths. Nielsen (1990) v.2, p.31 on the other hand gives the total area of 750 m². She believes that these baths lack a *palaestra* and likely does not include some of the same rooms as Ballu and Thébert do for their calculations.

[268] C. Courtois, *Timgad, antique Thamugadi* (Alger, 1951) p.81 identifies these areas as houses.

[269] Thébert (2003) p.239. The entrances on the west side seem to be primarily for workers as they lead into corridors that serve the heated bathing rooms.

[270] The measurements are based on the plan given by Thébert (2003) p.655 pl.CV n.2.

The *frigidarium* is approximately 113 m² and has a pool in the north end of the room. In the south of the *frigidarium* is a small latrine. This latrine has a door at the south end that connects to a corridor, which leads to the *palaestra*. This corridor also gives access to the heated rooms located on the west side of the baths.

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[271] Ballu (1911) p.127 and Thébert (2003) p.239.
[272] Thébert (2003) p.239.

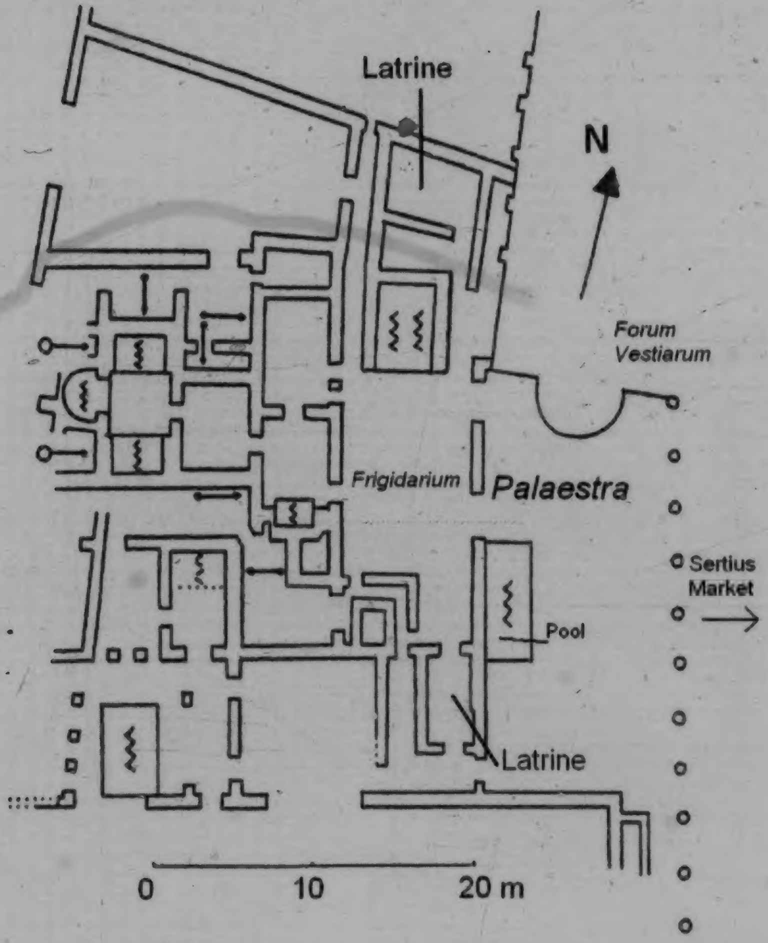

Figure A3.18.1

3) Artworks associated with the *palaestra*

The only artwork found in the *palaestra* was a mosaic located in the northwest corner.[273]

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[273] Two mosaics were also found in the *frigidarium*. See Germain (1969) pp.97-98 for the specific designs of these two mosaics.

4) Date of *palaestra*

The date for the construction of the Sertius Baths is unknown. Germain notes that the mosaics in the baths are stylistically similar to other North African mosaics made during the second half of the 2nd century AD, but could not give a firm date for these baths.[274] Thébert dates the baths to the Severan period. He notes that there is a door that connects the market of Sertius, constructed in the Severan period, with the *palaestra* of these baths, but finds it unlikely that they could be connected functionally.[275]

5) Excavation Bibliography

Ballu, A., *BAC* (1906) pp.197-199
______ *Les ruines de Timgad antique Thamugadi. Sept années de découvertes* (Paris, 1911) pp.127-130
______ *BAC*, (1913) pp.173-174 & 176-177
Courtois, C., *Timgad, antique Thamugadi* (Alger, 1951)
Germain, S., *Les mosaiques de Timgad* (Timgad, 1969) pp.97-98
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.92-94
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.239

6) Textual evidence

None. The only significant inscriptions from Thamugadi include a *gymnasium* inscription and the inscription found in the Byzantine fortress; but neither refers to the Large East Baths.[276]

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[274] Germain (1969) p.98.
[275] Thébert (2003) p.239.
[276] For the *gymnasium* inscription see footnote 237. For the inscription in the Byzantine fortress see the dating section of the Filadelfis Baths at Thamugadi.

19. Thamusida (Sidi Ali ben Ahmed): River Baths

1) Location/Urban context of *palaestra*

The River Baths at Thamusida are located near Sidi Ali ben Ahmed in Morocco. The baths are located at the east end of Thamusida (Figure A3.19.1). They are in the shape of a rectangle and were built using *opus africanum*. In its largest form they measured 50 m by 60 m.[277] Rebuffat notes that there were two separate sections of the baths, with the south end being larger than the north.[278] Thébert argues that the larger south baths, although flanked, were separate from the smaller north baths. Except for a servants' corridor used to service both structures, he believes this separation meant that the baths were organized into male and female sections.[279] Eventually, near the end of the 2nd century AD, the two joined to form one large bath. The *palaestra* was located to the east of the south baths. The heated rooms of the south baths were located in the southwest while the cold rooms were found in the northwest. The north baths were linear with the heated rooms in the east and cold rooms in the west. Eventually the baths were abandoned around AD 280 after the city was deserted.[280] No other entertainment structures are known at this site.

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[277] R. Rebuffat, *Thamusida fouilles du Service des antiquites du Maroc, II, EFR Melanges d'archeologie et d'histoire, supplements, 2* (Rome, 1970) p.177. Thébert (2003) p.265 does not agree with these calculations stating that Rebuffat does not include annexations that should belong to the baths. Instead he sees the larger baths to be around 3000 m^2 and the smaller baths in between 700 m^2 and 900 m^2. Nielsen (1990) v.2, p.17 also gives an area of 960 m^2 but does not explain how she comes to this calculation.

[278] Rebuffat (1970) p.25.

[279] Thébert (2003) p.265.

[280] Nielsen (1990) v.2, p.17.

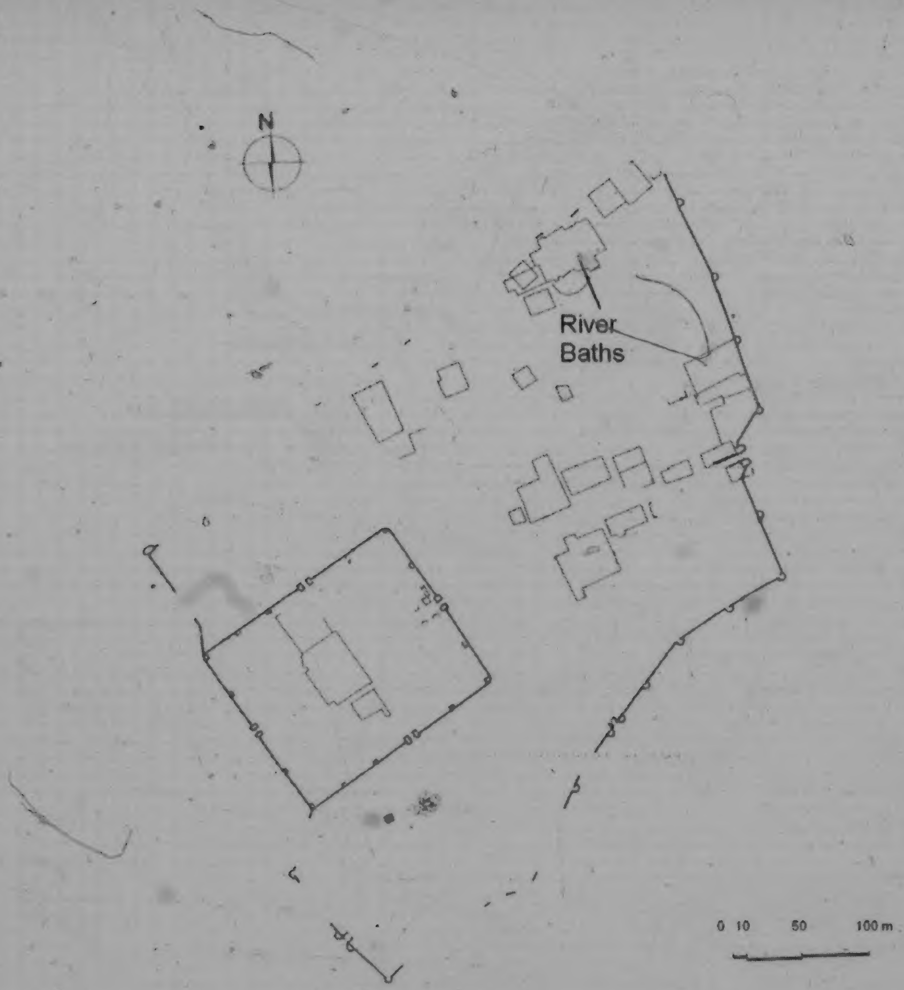

Figure A3.19.1

2) Description of *palaestra*

It was not until what Rebuffat labeled as phase III of the baths that a *palaestra* was constructed in the River Baths (Figure A3.19.2). This is dated sometime after Hadrian but prior to AD 150. Before the *palaestra* was constructed the area initially had a pool. The new *palaestra*, which was an irregularly-shaped rectangle, measured 6.10 m at the south end and 5.4 m at the north end while the east side measured 15.3 m and the west side was 15.4 m. On the east and west sides there were colonnades. The area was open to the sky and does not appear to have been paved. Entrance into the *palaestra* was at the south end with a few steps leading down onto the surface. This door also became the entrance into the rest of the south baths.[281] A door in the southwest corner led to the heated rooms, while the cold rooms were to the west of the *palaestra*. There was no access to the smaller baths in the north and thus one must assume that patrons of the north baths did not use the *palaestra*.

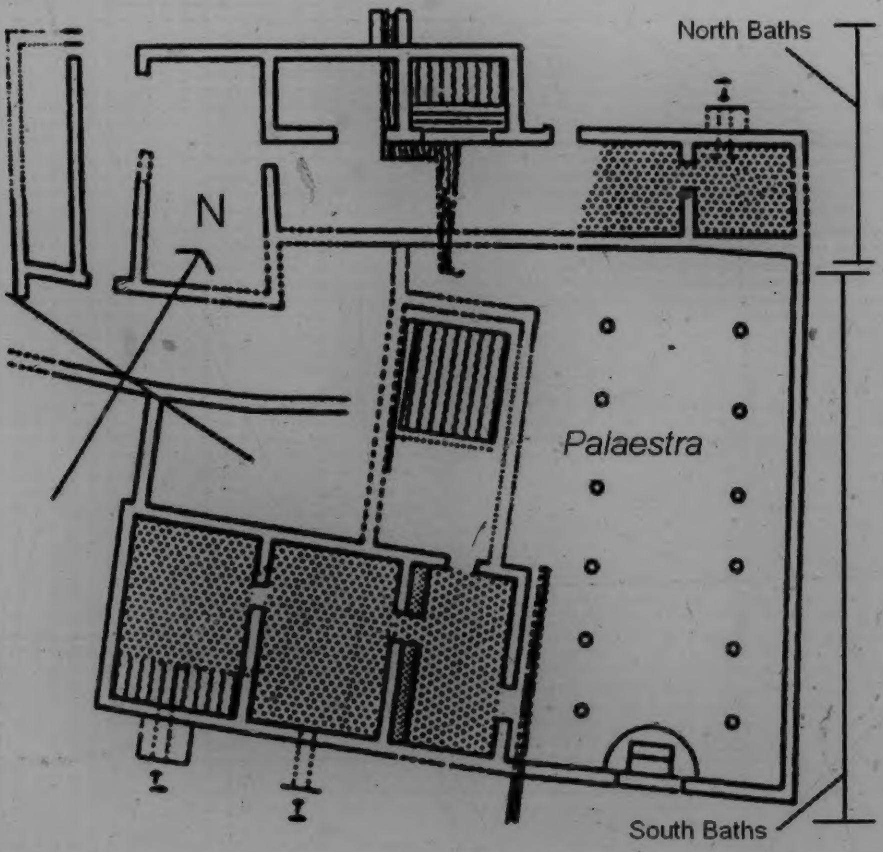

Figure A3.19.2 (Scale 1:500)

During the reign of Antoninus Pius, around AD 165, the *palaestra* underwent significant alterations (Figure A3.19.3). The columns of the *palaestra* were replaced with walls, and small rooms were constructed behind them. On the east side, there were three rooms, with the northeast room becoming a latrine. The west side of the *palaestra* became a corridor, which led into the heated rooms.[282] Both Rebuffat and Thébert believe that although alterations were made around the *palaestra* and that it was now covered, the function of the room continued to be for exercising.[283] After the mid 2nd century AD changes, this area underwent no further significant changes until the River Baths were abandoned.

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[281] Rebuffat (1970) pp.57, 61, 74, 77, 161 & 177. Thébert (2003) p.265 agrees with Rebuffat that this area was a *palaestra*.

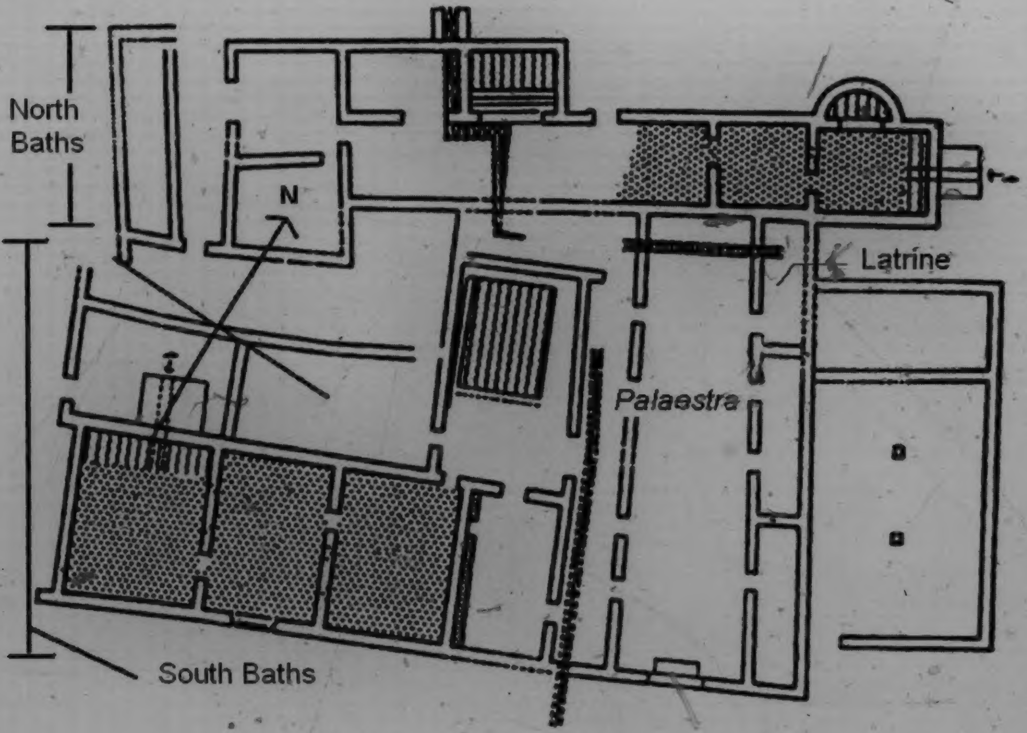

Figure A3.19.3 (Scale 1:500)

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[282] Rebuffat (1970) pp.48, 58, 68, 73, 166 & 170.
[283] Rebuffat (1970) p.170 and Thébert (2003) p.265.

3) Artworks associated with the *palaestra*

Fragments of painted wall plaster with bands of blue and a little red were discovered in the *palaestra*.[284]

4) Date of *palaestra*

The River Baths were first constructed sometime near the end of the 1st century AD. Evidence suggests alterations were made to the baths during the 2nd and 3rd centuries AD. It was during the middle of the 2nd century that the *palaestra* was constructed. The eventual abandonment of the baths was somewhere between AD 274 and 280.[285] Various building phases of the baths were established primarily from coin and pottery evidence.[286]

5) Excavation Bibliography

Rebuffat, R., *Thamusida fouilles du Service des antiquites du Maroc, II, EFR Melanges d'archeologie et d'histoire, supplements, 2* (Rome, 1970) pp.21-213

Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.63, 66, 69, 140 and 147

Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.264-266

6) Textual evidence

None.

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[284] Rebuffat (1970) pp.63-64. Other items found in the *palaestra* of the River Baths includes 33 coins beginning with the emperor Claudius (AD 41-54) and ending with the emperor Tetricus (AD 271-273). Different types of pottery were also uncovered here.

[285] Thébert (2003) p.265.

[286] See Rebuffat (1970) especially pp.165-169 for the more specific dates regarding the phases of the River Baths.

20. Thuburbo Maius (Henchir Kasbat): Summer Baths

1) Location/Urban context of *palaestra*

The Summer Baths in Thuburbo Maius are located in the southwest of the city and are about 100 m southwest of the forum (Figure A3.20.1). The baths were constructed using *opus africanum* and cover an area of around 2800 m², but this does not include the *palaestra*. The *palaestra* of the Petronii lies northwest, however its close proximity suggests that it was associated with these baths rather than functioned as a separate structure. A temple of Asclepius abutted the southeast wall of the *palaestra*. Two rooms from the Summer Baths, identified as change rooms, shared the southwest wall of the *palaestra*. Streets ran along the outside of the northeast and northwest walls. The road outside the northwest wall led to a semi-circular latrine, also not directly connected to the baths, and the main entrance into the baths.[287] Thuburbo Maius also had an amphitheatre, which was located in the southeast corner of the city.

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[287] See Thébert (2003) p.168 for the specifications of these rooms.

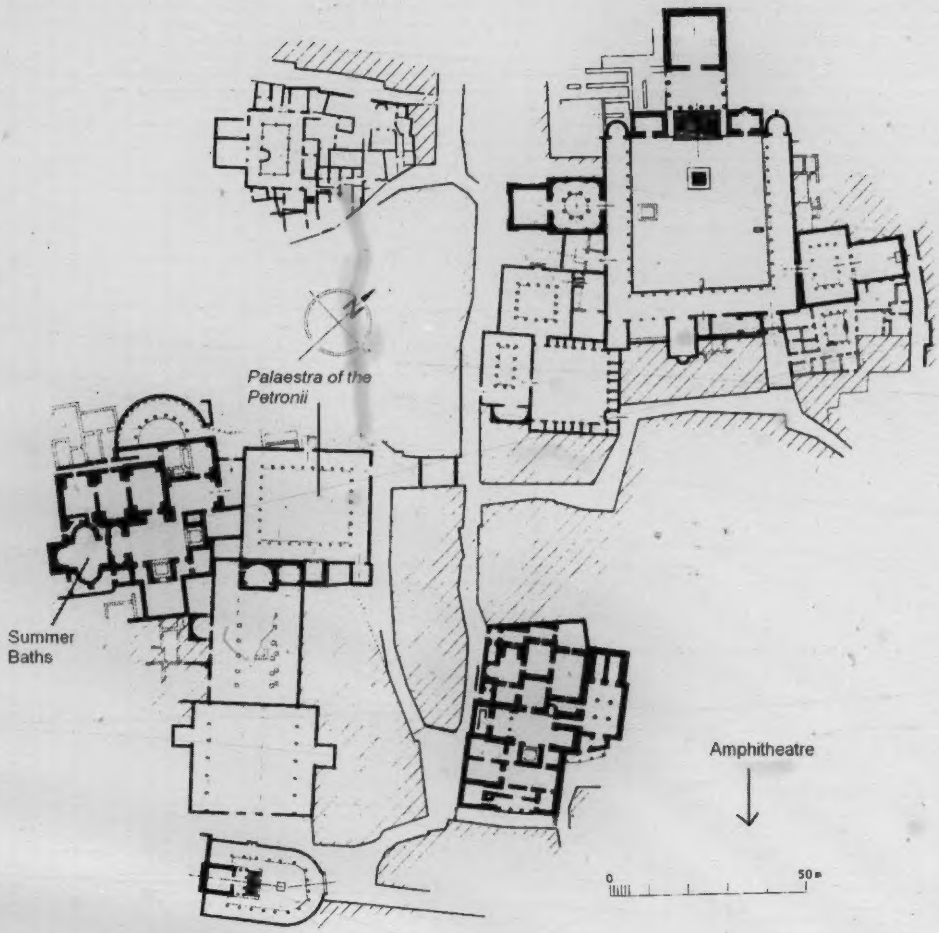

Figure A3.20.1

2) Description of *palaestra*

The *palaestra* of the Petronii was square, with the floor level of the structure being 0.8 m higher than the floor level of the baths (Figure A3.20.2 & A3.20.3).[288] The *palaestra* had three entrances with the two main ones in the northwest and northeast and the third one located on the east angle of the structure. Lézine believed that there was likely another door that connected to the Summer Baths but it was blocked off during the 6th century.[289] A Corinthian portico surrounded the structure; the columns were made of marble, while the bases and capitals were made of limestone. The walkway around the *palaestra* was two steps up from the inner court and was paved in marble. Carved in the south corner of the courtyard was 36-hole game board.[290] There were also three open bays of unknown purpose attached to the structure, although Lézine suggests that the west bay was possibly used as a cloakroom or for resting.[291] The walls of the *palaestra* are preserved to a height in some places of around 1.3 m and range in thickness between 62 cm and 66 cm.[292] Leaving the *palaestra* from the northwest door, one turns left to go to the Summer Baths and the latrine, which sits adjacent to the baths.

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[288] L. Drappier, « Les thermes de Thuburbo Maius » *BAC* (1920) p.64. Drappier also believes that the *palaestra* was constructed over an area that had previously been connected to the baths.

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[289] Lézine (1968) p.19.

[290] http://www.planetware.com/tunisia/thuburbo-majus-palaestra-of-the-petronii-tun-za-tmpp.htm.

[291] Lézine (1968) p.19.

[292] M.A. Lézine, *Architecture romaine d'afrique : Recherches et mises au point* (Tunis, 1961) pp.108-110.

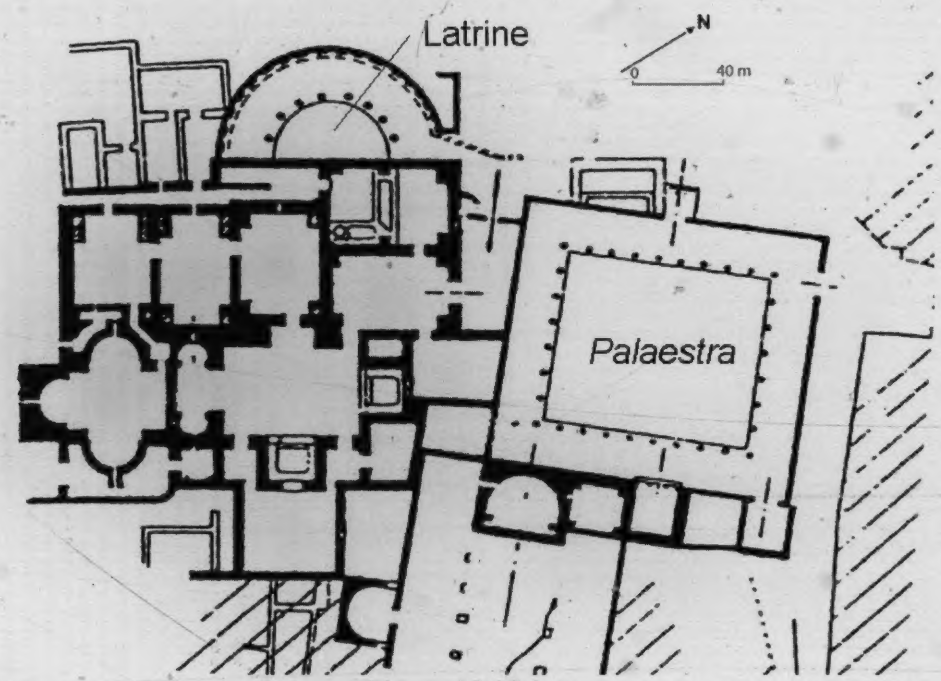

Figure A3.20.2

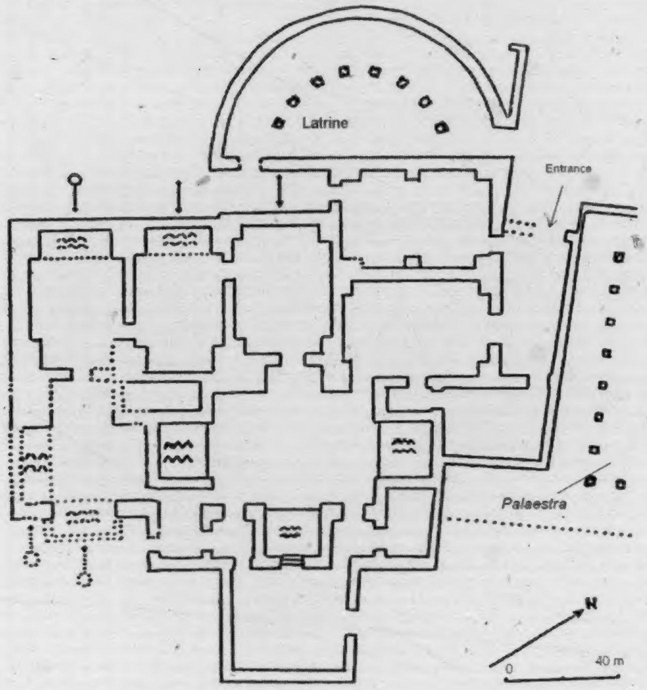

Figure A3.20.3

3) Artworks associated with the *palaestra*

There are a few artworks associated with the *palaestra* of the Petronii. The architrave of the surrounding portico possessed an inscription mentioning the Petronii, as well as at the north end there are the remains of a relief showing three dancing maenads.[293] One of the capitals was ornately decorated with different motifs including grapes, pomegranates and pinecones.[294]

4) Date of *palaestra*

The date for the construction of these baths is thought to be during the later years of the 2nd to the beginning of the 3rd century AD. Material evidence found in an excavation trench in the *frigidarium* supports this idea.[295] Thébert believes that if the *palaestra* of the Petronii was associated with the Summer Baths then the construction date could be more precise, as the *palaestra* was built in AD 225.[296] An inscription from the baths mentions that they were repaired in AD 361.[297] Mosaics in the baths have been dated to the latter half of the 4th to the beginning of the 5th century AD.[298]

5) Excavation Bibliography

Merlin, A., *BAC* (1914) p.CLXVVI & ff.
______ *BAC* (1915) p.CLIII
______ « Les inscriptions des thermes d'été de Thuburbo Maius », *BAC* (1916) pp.41-50
Drappier, L., « Les thermes de Thuburbo Maius » *BAC* (1920) pp. 64-75
Lézine, M.A., *Architecture romaine d'afrique : Recherches et mises au point* (Tunis, 1961) pp.108-110

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[293] *ILAfr*.271 mentions the Petronii.

[294] Lézine (1968) p.19.

[295] Thébert (2003) p.167 does not say what this material evidence was.

[296] *ILAfr*.271. Thébert (2003) p.167 believes that the baths and the *palaestra* were erected around the same time.

[297] *ILAfr*.273.A et B, *AE*, 1916.87 & 88 and A. Merlin, « Les inscriptions des thermes d'été de Thuburbo Maius », *BAC* (1916) pp.41-50. See # 1, in the Thuburbo Maius part of section one in Appendix Four.

[298] See above for the information on the rebuilding inscription, as well as discussion concerning the artwork associated with these baths.

Lézine, M.A., *Thuburbo Maius* (Tunis, 1968) pp.19-21

Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.91-92

Thébert, Y., « Les sodalités dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) pp.193-204, esp. p.202

Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.222-230

Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.166-169

6) Textual evidence

None. An inscription, dating to AD 361, found in the baths refers to the building as the Summer Baths.[299] The name of the *palaestra* comes from an inscription placed on the architrave of the peristyle indicating that Petronius Felix and his sons dedicated the monument to members of the Severan family.[300] An inscription, dating to AD 212, mentioning a *gymnasium* was also discovered at Thuburbo Maius.[301]

21. Thugga (Dougga): Licinian Baths

1) Location/Urban context of *palaestra*

The Licinian Baths at Thugga (Dougga) are located in the center of the city on a steeply-sloping site and hemmed in by other monuments (Figure A3.21.1). The baths are constructed in *opus africanum* and cover around 2000 m².[302] They are for the most part symmetrical and run north to south. The main entrance into the baths is located to the north of a narrow alley and the *palaestra* is in the northeast part of the structure. In order to construct these baths the terrain had to be altered by terracing the hill in the north and filling in earth at the south. This meant that the bather had to descend 6 m of steps to enter into the facility. Thugga has many other entertainment facilities. There is a theatre northeast of the Licinian Baths and a circus a long way to the northwest of the baths. Also northwest, between the circus and the baths are the remains of a possible amphitheatre.

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[299] *ILAfr.*273.A et B, *AE*, 1916.87 & 88 and Merlin (1916) pp.41-50.

[300] *ILAfr.*271. It is thought that the monument was dedicated to Alexander Severus and Julia Mamaea, but these names are only hypothesized. See Thébert (2003) p.167 and Yegül (1992) pp.222-226.

[301] *ILTun.*718.

[302] Nielsen, v.2 (1990) p.28 and Thébert (2003) pp.177-178.

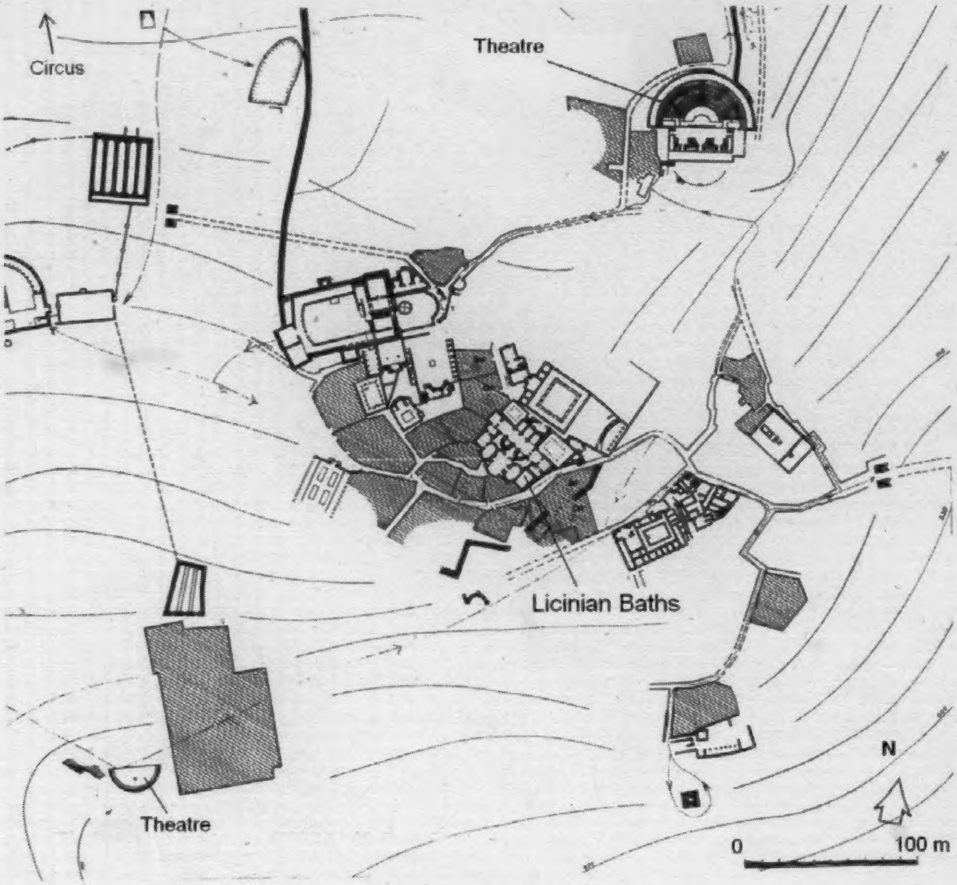

Figure A3.21.1

2) Description of *palaestra*

The main entrance into the Licinian Baths was located at the north end of the structure (Figure A3.21.2). One entered into a small vestibule measuring 6.95 m by 5.49 m that rested on top of some cisterns. From here one descended many steps to reach a square peristyled room, each side measuring 11.5 m, with twelve marble columns surrounding the room. The function of this room remains uncertain, but it appears to replicate the *palaestra*, making the bath more symmetrical.[303] It is thought that this room was roofed but Thébert calls this into question because the room mimics the *palaestra* and may have been open to the sky.[304] Every bather had to pass through this room to enter and use the bathing facilities. Thébert suggested that the room may be the *atrium thermarum* mentioned in the inscription from the 4th century.[305] A bather moved south from here into a small room, then eastwards into the *frigidarium*. To the east is another small room and a change room. The *palaestra* is entered through a door at the north end of the small room.

The *palaestra* measures 17.53 m by 13.7 m, is open to the sky and the floor has remains of concrete. There were 16 columns surrounding the area on top of bases that were still present. The columns were notched on the top indicating that something was laid across them. Whatever was placed on top of the columns was not recovered among the debris of the room. It is believed however that the lintels found in the Byzantine fort likely sat along the top of these columns.[306] In the northeast corner was a door leading to a small room, which Poinssot suggested was a latrine, although Thébert disputes this.[307] Lézine suggests instead that the room may have held the instruments necessary for working out in the *palaestra*, but there is nothing to substantiate this idea.[308] Excavations in the south corner have uncovered a monumental staircase belonging to an earlier building. The *palaestra* in the Licinian Baths is interesting because it is not in a typical location compared to the other *palaestrae* in this study. Most of the *palaestrae* are accessible from outside of the baths, but here a bather has to pass through the *frigidarium* in order to access the area.[309] Poinssot suggests that this is due to the topography, which does not otherwise allow access to that side.[310]

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[303] Thébert (2003) p.178.

[304] L. Poinssot et R. Lantier, *BAC* (1925) p.XXX, C. Poinssot, *Les ruines de Dougga* (Tunis, 1958) p.50 for the belief that the room was covered over and Thébert (2003) p.178 for questioning this idea.

[305] Thébert (2003) p.178.

[306] Poinssot et Lantier, *BAC* (1925) pp.XXXI-XXXII.

[307] Poinssot (1958) p.50 suggested this because a drain ran by it. Thébert (2003) p.178 notes that the drain only passes by it with no intention of taking any type of waste away.

[308] Lézine (1961) p.21, n.80.

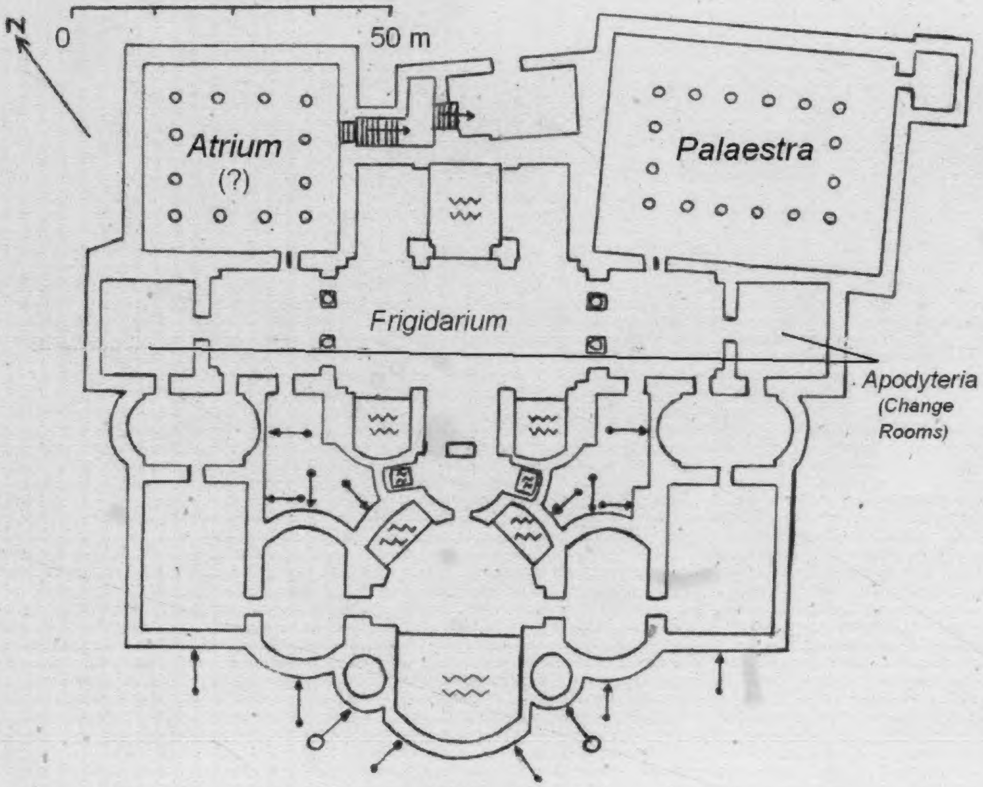

Figure A3.21.2

3) Artworks associated with the *palaestra*

Among the debris in the northeast *palaestra* were the remnants of sculptures. One was an unidentified civic notable in white limestone measuring 1.9 m high.[311] There are no other known artworks in this area. The other room with columns in the northwest corner of the baths, possibly the *atrium*, did have some artwork.[312] The columns here had capitals with ancanthus-and-lotus designs. The walls of the room were covered in green marble veneer, with white marble at the base and the floors were paved with geometric mosaics.[313]

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[309] Yegül (1992) p.210 notes that the *palaestra* appeared to have a lower entrance from the street but it was later blocked.
[310] Poinssot (1958) p.50.
[311] Poinssot et Lantier, *BAC* (1925) p.XXXII.

4) Date of *palaestra*

The most accepted date for the construction of the Licinian Baths is during the reign of Gallienus (emperor from AD 253-268).[314] This date comes from an inscription dedicated to Gallienus and his wife Salonina.[315] Although it was found in the Byzantine fortress, it is suspected to come from the *palaestra* of these baths. If the inscription did come from the *palaestra* then it suggests that the baths were constructed at the same time.[316] However, even if this inscription did come from the *palaestra* of the Licinian Baths, it could actually be referring to the construction or restoration of the *palaestra* and not the construction of the entire bath complex.

Another inscription, a third of which was found inside the Licinian Baths, mentions that the *atrium* of the Licinian Baths was restored during the reign of Gratian (emperor from AD 375-383).[317] This verifies that the structure was used at least until the end of the 4th century AD. Christol uses this same inscription to suggest the possibility that the Licinian Baths were constructed during the Severan period (early 3rd century

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[312] The artwork found in this room will be given because it is similar in shape to the northeast *palaestra* and thus may have acted as an alternative exercise area.

[313] Poinssot (1958) pp.48-50.

[314] Yegül (1992) p.206, Romanelli (1970) p.182, Poinssot (1958) p.48 and Nielsen, v.2 (1990) p.28.

[315] *CIL*, 8.26559 = *ILTun*.1416.

[316] Thébert (2003) p.177 mentions that the name Licinius could refer to Valerian as well, putting the date about a decade earlier.

[317] *ILAfr*.573 gives the two fragments not found in the baths. *ILTun*.1500 gives all three fragments of the inscription. Also *AE*, 1925.31 and Poinssot et Lantier, *BAC* (1925) pp.XXXII-XXXIII.

AD).[318] He argues that instead of reading that the *atrium* of the Licinian Baths (*thermae* [*Lic*]*inianae*) was restored, the text should instead read the *atrium* of the Antoninian Baths (*thermae* [*Anton*]*inianae*) was restored. If correct then the inscription may refer to the emperor Caracalla.[319] Strengthening the idea of an early 3rd century construction date for the baths, Thébert notes that the architecture in the northwest peristyle is characteristic of the beginning of the 3rd century AD.[320]

5) Excavation Bibliography

Poinssot, L. et Lantier, R., *BAC* (1925) pp.XXVIII-XL
Poinssot, C., *Les ruines de Dougga* (Tunis, 1958) pp.48-52
Lezine, M.A., *Architecture romaine d'afrique : Recherches et mises au point* (Tunis, 1961) pp.22-24
Romanelli, P., *Topografia e archeologia dell"Africa Romana* (in Enciclopedia Classica) sez. III, vol. IX, t. VIII (Turin, 1970) pp.182-183
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.87-90
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) pp.206-212
Labbe, M., *Recherches surl les thermes liciniens à Dougga (Tunisie)*, mémoire de maîtrise, (Université de Toulouse-le Mirail, 1995)
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.176-179

6) Textual evidence

None. There are a few inscriptions that may mention these baths. One-third of an inscription mentioning a bath (*thermar*[*um*]) was found inside these baths, while the other two fragments were located elsewhere in the city.[321] Also inscribed on this inscription were the words *thermar*[*um Lic*]*inianarum*, thus giving these baths its name. Another inscription is suspected to come from the *palaestra*. It is thought that the lintels from the *palaestra* were broken during the later empire and reused in the Byzantine fortress.[322] Parts of this inscription contained the words *thermae* [*Lic*]*inianae*, strengthening the belief that the lintels came from these baths. Another lintel carried the word *porticum* (portico) perhaps referring to the colonnaded courtyard in the *palaestra*. Thébert however argues that it is impossible to positively confirm that these lintels came from the *palaestra* of these baths.[323] There were also a few fragmentary and funerary inscriptions recovered from these baths.[324]

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[318] M. Christol, « Gallien, Thugga et Thibursicum Bure » *AntAfr* 14 (1979) p.219.

[319] Thébert (2003) p.177 argues against the possibility that the inscription referred to Marcus Aurelius because the baths do not correspond architecturally to that period (AD 161-180). He also argues against the idea that the inscription referred to Elagabalus (AD 218-222) because of the *damnatio memoriae*, which would have completely erased his name from the text.

[320] Thébert (2003) p.177.

[321] *ILAfr.*573 gives the two fragments not found in the baths. *ILTun.*1500 gives all three fragments of the inscription. Also *AE*, 1925.31 and Poinssot et Lantier, *BAC* (1925) pp.XXXII-XXXIII. See # 1, in the Thugga part of section one in Appendix Four.

22. Thysdrus (El Djem): Large Baths

1) Location/Urban context of *palaestra*

The Large Baths at Thysdrus (El Djem) cover, excluding the cisterns, an area of around 2300 – 2400 m^2 and were constructed using the *opus incertum* technique.[325] To the east of the cisterns are two wells believed to have provided water for the baths.[326] The baths are semi-symmetrical and although they are in a bad state of preservation, some of the walls are preserved to a height of 2 m. There were two amphitheatres in Thysdrus, a smaller 2nd century one and a much larger one constructed in the mid 3rd century AD. There was also a circus located in the city and the road leading to it went by the Large Baths.

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[322] *CIL*, 8.26559 = *ILTun*.1416. Poinssot et Lantier, *BAC* (1925) pp.XXXI-XXXII.

[323] Thébert (2003) p.177.

[324] Poinssot et Lantier, *BAC* (1925) pp.XXXIV-XLI.

[325] Yegül (1992) p.220 and Thébert (2003) p.181. Drappier (1920) p.465 states that the cisterns cover around 600 m^2 but the *palaestra* likely covered more area than this.

[326] Drappier (1920) p.466.

2) Description of *palaestra*

Although there are no physical remains of a *palaestra*, it is believed to have been located to the east of the baths (Figure A3.22.1). This location would coincide with many other *palaestrae* in North Africa, such as at Gigthis, Lambaesis and Caesarea.[327] Yegül and Krencker postulate that the area was colonnaded and they appear to base this assumption on the evidence of columns unearthed in the cisterns.[328] The main entrance into the baths was located at the south end of the baths, but there appear to have been doorways along the east side of the structure, which would have connected to the *palaestra*. Entering through either of the doorways along the east led into rooms, which Thébert believed acted either as change rooms or as rooms for exercise.[329] These rooms provided access into the *frigidarium*. West of the *frigidarium* were the heated rooms.

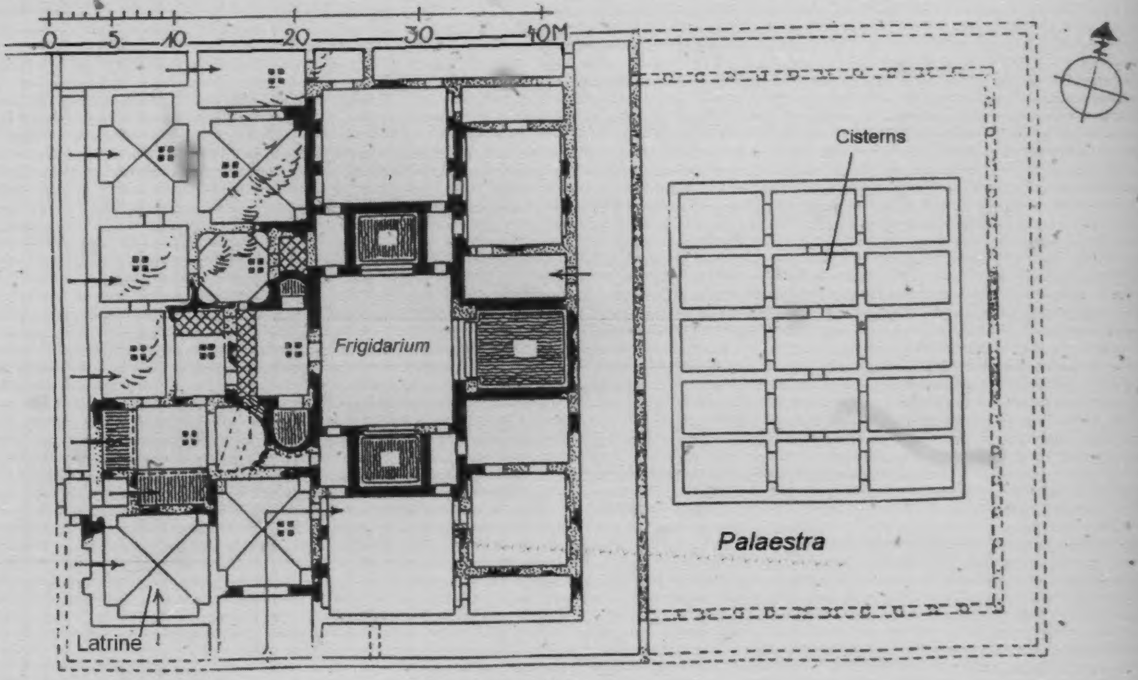

Figure A3.22.1

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[327] Based on the plan of the baths the *palaestra* can be estimated to measure approximately 1000 m² in area.
[328] Krencker (1929) p.199 and Yegül (1992) p.220.
[329] Thébert (2003) p.182. Krencker (1929) p.199 hypothesized that they were change rooms.

3) Artworks associated with the *palaestra*

None. There was a lot of debris within the cisterns including pieces of columns, bases, capitals, marble and pieces of sculpture, but whether these pieces come from this area is unclear. A head of Hercules was also discovered in one of the rooms near the *frigidarium*.[330]

4) Date of *palaestra*

The construction of the Large Baths was initially thought to be at the end of the 2nd century AD.[331] This date was primarily based on inscriptions found in the cisterns, which refer to birthday gifts given to public officials, circus games and a banquet for the people.[332] There is nothing in these inscriptions that points to a 2nd century date, and therefore Thébert dates the baths to this period, on the basis of comparison to other baths.[333] Another inscription found in the cisterns mentions Constantine and was believed to refer to restorations done to the baths.[334] Thébert, however, rejects this idea, concluding that the history of these baths is very unclear.[335]

5) Excavation Bibliography

Gauckler, P., *BAC* (1901) pp.CCXXVI-CCXXVIII
_______ *BAC* (1902) pp.CLXXXVI-CLXXXVII
Carton, L., « Excursion et promenade. El Djem (Thysdrus) », *BSAS* 4 (1904) pp.211-212
Gauckler, P., « Rapport sur des inscriptions latines decouvertes en Tunisie de 1900 a 1905 » *NAMS* 15, (1908) pp.345-352 and pl.VII
Drappier, L., « Les Thermes d'El-Djem » *BAC* (1920) pp.465-471 and pl.XXI

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[330] P. Gauckler, « Rapport sur des inscriptions latines decouvertes en Tunisie de 1900 a 1905 » *NAMS* 15, (1908) p.345.
[331] Gauckler (1908) p.346, and Krencker (1929) p.199.
[332] *CIL*, 8.22856-22861.
[333] Thébert (2003) p.181.
[334] *CIL*, 8.22853. See # 1, in the Thysdrus part of section one in Appendix Four.
[335] Thébert (2003) p.181.

Krencker, D., Krüger, E. Lehmann, H., and Wachtler, H., *Die Trierer Kaiserthermen* (Augsbourg, 1929) pp.198-200
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.90-91
Thébert, Y., « Problèmes de circulation dans les thermes d'Afrique du Nord » in *Les Thermes Romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) p.147
Yegül, F., *Baths and Bathing in Classical Antiquity* (New York, 1992) p.220
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.181

6) Textual evidence

None. There were some inscriptions found in the cisterns, the area believed to have been the *palaestra*. Whether these inscriptions came from the baths or whether they were deposited there later as refuse when the cisterns were no longer used is unclear.

23. Utica (Hr. Bou Chateur): Large Baths

1) Location/Urban context of *palaestra*

The Large Baths at *Utica* are located in Tunisia, 33 km northwest of Carthage. They are situated in the north part of the city near the ancient shoreline (Figure A3.23.1). Although the baths are not completely excavated they appear to be symmetrical.[336] They were constructed on an esplanade, which forms a trapezoidal shape and measures roughly 130 m by 195 m within an area of 26,195 m². The baths lie 25 m from the edge of the esplanade both at the north and south, while they lie 40 m from the west edge of the esplanade and 46 m from the east edge.[337] This would mean that the baths covered an area of around 5,990 m².[338] Lézine surmises that the north end of the esplanade connected to the avenue of porticoes coming from the east.[339] The suspected *palaestrae* were situated to the east and west of the *frigidarium*, which was at the north end of the baths and may have measured 770 m² each.[340]

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[336] Thébert (2003) p.186.
[337] Lézine (1968) p.141.
[338] Thébert (2003) p.186.

The city of Utica possessed many structures for entertainment. Approximately 300 m south of the baths was an amphitheatre and west from here, around 340 m, was the theatre. A second theatre was located in the east half of the city and in the southeast section of the city there was the circus and evidence for a second smaller amphitheatre. Lézine speculated that a second larger circus was situated immediately west of the baths, but there is no conclusive evidence to support this.[341]

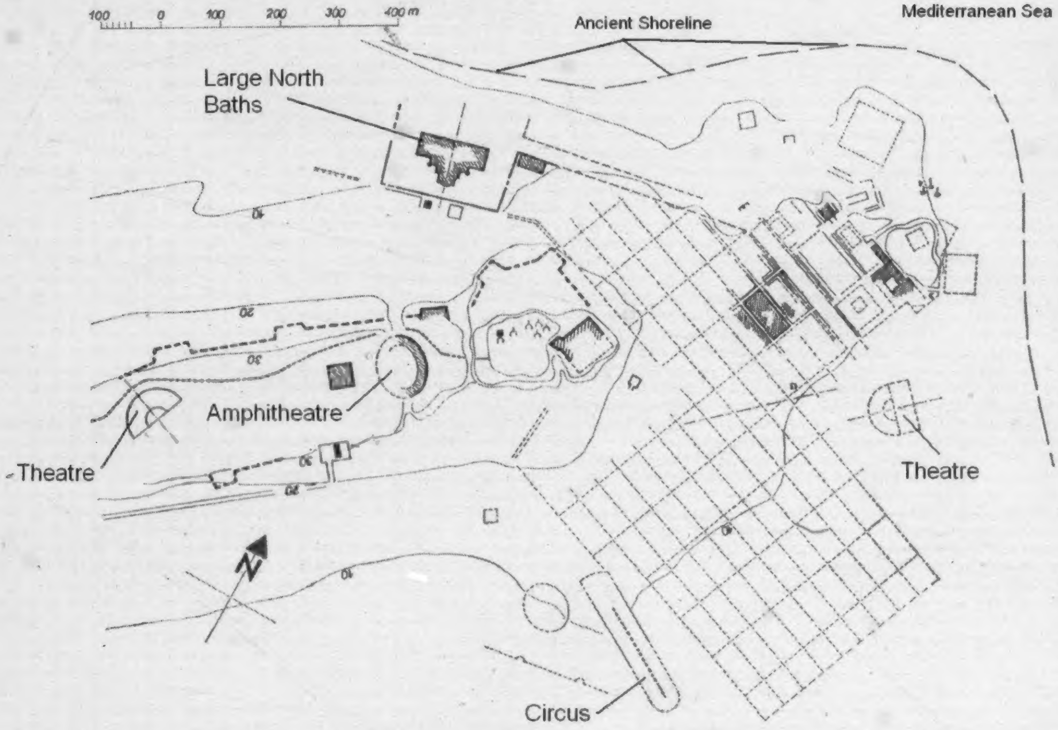

Figure A3.23.1

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[339] Lézine (1968) p.141. Lézine notes that there were other accesses to the esplanade other than the avenue of porticoes.
[340] Thébert (2003) p.186. Thébert admits that this measurement is purely hypothetical.
[341] Lézine (1968) p.82, fig. 1.

2) Description of *palaestra*

The *palaestrae* are believed to have covered around 770 m² (Figure A3.23.2). If the *palaestrae* were situated here then they were connected to the *frigidarium*. The *frigidarium* has not been entirely excavated. A large portion of the south end and the walls of the north side were exposed enough to project that the *frigidarium* was 32 m by 20 m and 640 m².[342] The south end of the *frigidarium* contained two small cold pools. At the north end of the room, an apse suggests the presence of either one large pool or a couple of smaller pools, similar to those found at the south end of the *frigidarium*.[343] Only further excavation will determine whether there were *palaestrae* here and whether they connected to any other rooms besides the *frigidarium*.[344]

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[342] Thébert (2003) p.186.

[343] Lézine (1968) p.145 for the latter, and Thébert (2003) p.186 for the former.

[344] If there were no *palaestrae* at these locations, then the esplanade that the baths were constructed on likely provided a more than suitable area for exercising.

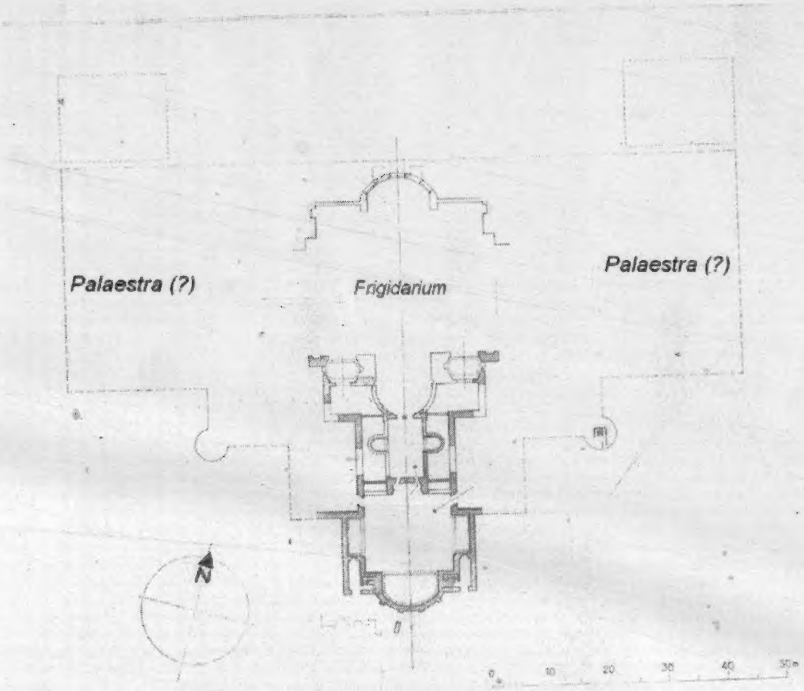

Figure A3.23.2

3) Artworks associated with the *palaestra*

None.[345]

4) Date of *palaestra*

As the Large Baths at Utica are not fully excavated there is no positive date for their initial construction. Lézine argues that the baths were built after the reign of Hadrian (AD 117 – 138) because that was when a large aqueduct was constructed at Utica. This aqueduct supplied water to the baths and thus was necessary for its function.[346] Picard believes that the baths were constructed either at the end of the 2nd or the beginning of the

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[345] There was an athletic mosaic discovered in the threshold of a house in Utica. See figure 1.10.
[346] Lézine (1968) p.142.

3rd century AD, since they were modeled after the Antonine baths at Carthage.[347] Further excavation is required in order to acquire a more precise date for the baths.

5) Excavation Bibliography

Torr, C., « Les ports de Carthage », *RA* 24 (1894) pp.32-47, esp.46-47
Picard, G., « Un prétendu port à Utique », *RA* 42, (1953) pp.105-106
Lézine, M.A., *Architecture romaine d'afrique : Recherches et mises au point* (Tunis, 1961) pp.27-28
______ *Carthage. Utique : Études d'architecture et d'urbaniseme* (Paris, 1968) pp.141-145
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.186

6) Textual evidence

None.

24. Volubilis (Ksar Pharoun): North Baths

1) Location/Urban context of *palaestra*

The North Baths at Volubilis are the biggest in the city and are located just north from the centre of the city on the Decumanus Maximus (Figure A3.24.1). The entire structure is rectangular, covers a little less than 2000 m² and was built using *opus africanum*.[348] The hot and cold rooms are located on the east side while the *palaestra* and its accompanying rooms are on the west side. On the west side, outside of the baths, were five shops and a latrine but Lenoir believes they were constructed much later.[349] The east side of the structure also possessed a large open space covering 32 m² but nothing is known about the function of this area.[350] There are no other known entertainment structures in Volubilis.

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[347] G. Picard, « Un prétendu port à Utique », *RA* 42, (1953) pp.105-106.
[348] Thébert (2003) p.274. Thouvenot (1945) p.156 gives the area of the baths as 1500 m².
[349] É. Lenoir, *Les thermes du nord à Volubilis, rechereches sur l'époque flavienne au Maroc*, thèse de doctorat, (Paris-Sorbonne, 1986) pp.33-36.

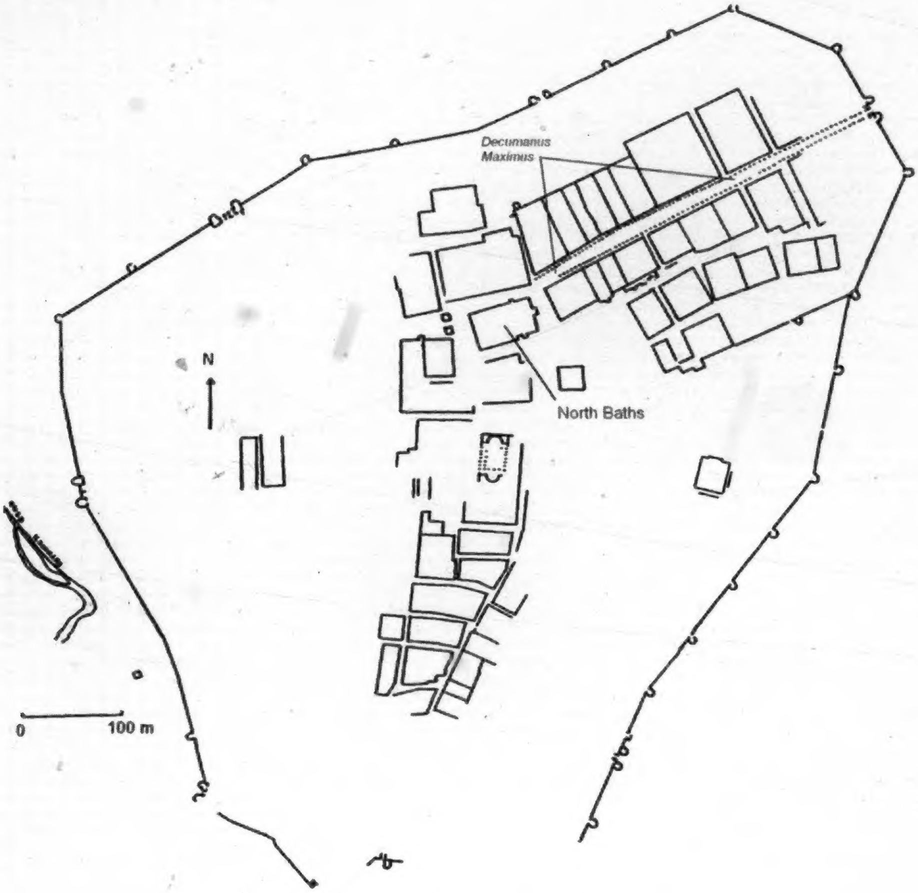

Figure A3.24.1

2) Description of *palaestra*

The principal entrance into the North Baths was located at the north and it led into a large room measuring 19.2 m by 7.35 m (Figure A3.24.2). The function of this room is unclear but a covered exercise room or change room have been suggested as possibilities.[351] After entering, a bather could move in one of three directions. Westwards led to two unidentified rooms, one slightly smaller than the other.[352] Eastwards led to the *frigidarium*, containing a cold pool, from which the heated rooms to the south were accessible.

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[350] É. Lenoir, « Thermes Romains de Maurétanie Tingitane » in *Les thermes romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) p.154.

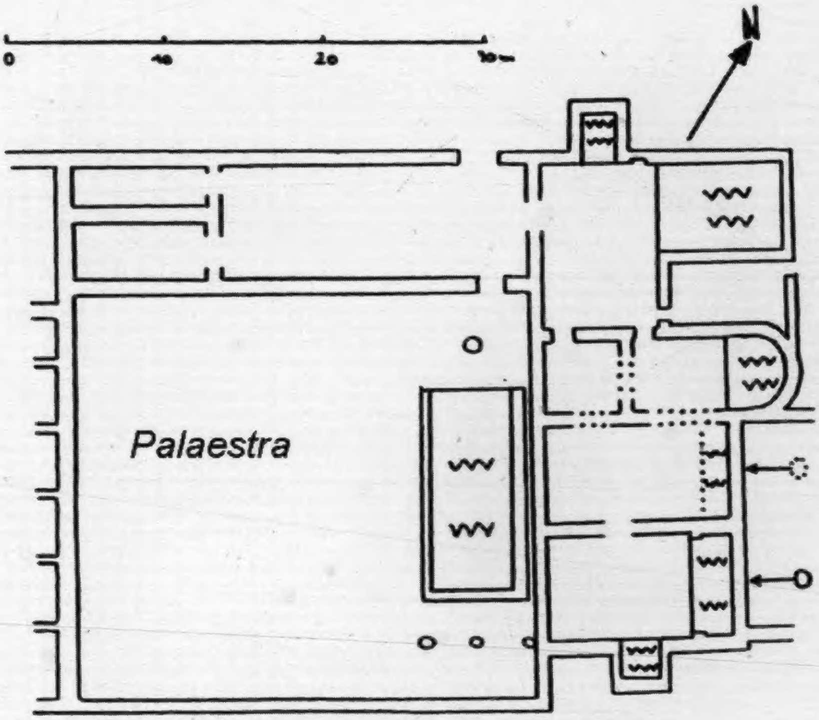

Figure A3.24.2

Continuing south from the entrance room one entered into the *palaestra*, measuring 28.5 m by 25.4 m. The inner court was open to the sky, had beaten earth for a floor and covered 320 m². Excavations have revealed that there were many drains underneath the *palaestra* but it is unclear when they were installed.[353] A portico surrounded all sides of the court except for the east where a pool was placed. The pool measured 12.5 m by 5 m, had six steps leading into it (making the pool 1.5 m deep), was open to the sky and was supplied by water coming from the south.[354]

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[351] Thébert (2003) p.274 suggests that it is a gymnasium, Thouvenot (1945) p.156 suggests it is a cloakroom and Lenoir (1986) p.16 gives both alternatives.

[352] Lenoir (1986) p.16 gives the measurements of these two rooms as 8.3 m by 2.6 m and 8.3 m by 3.6 m. She also suspects that they were later additions. Thébert (2003) p.274 calls them change rooms.

Lenoir measured the south portico to be 3 m wide, the west portico to be 2.8 m wide and the north portico to be 2.7 m to 2.8 m wide. Remains of some limestone columns were present along the south side and they measured 2.74 m in height and were 2.5 m apart. Lenoir has hypothesized, based on the distance between the two columns, that there were seven columns along this side.[355] Limestone capitals and bases were also found in the area and together with the column had a total height of 3.12 m. The capitals appear to have been stuccoed and Lenoir believes that the columns were also likely stuccoed. No positive evidence was found to suggest what colors were used to decorate the portico, but flakes of red and white plaster were recovered. Although parts of the stylobate around the *palaestra* are preserved there is no evidence to imply what type of floor was under the portico.[356] Thouvenot uncovered lintels in this area and suspected that they might belong to the portico. The lintels measured 2.53 m x 0.57 m x 0.53 m and were decorated with geometric motifs.[357]

The *palaestra* was heavily remodeled at a later date, with walls replacing the columns and rooms being built in the portico (Figure A3.24.3). The north portico was eventually turned into two heated rooms and Thébert argues that the east end of the north portico became a small *frigidarium* (Figure A3.24.4).[358] Another room was erected in the southwest corner and is believed to have been a sanctuary.[359]

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[353] Lenoir (1986) pp.29-33.
[354] R. Thouvenot, « Les thermes du Nord », *PSAM* 7 (1945) p.157 and Lenoir (1991) p.154.
[355] Lenoir suggests that the north side also had seven columns, while the west side had five columns. This is only if the distance between the columns was constant. Some of the columns along the other sides of the *palaestra* were also still present, but in various states of decay.
[356] Lenoir (1986) pp.18-22 & 197.
[357] Thouvenot (1945) p.164.

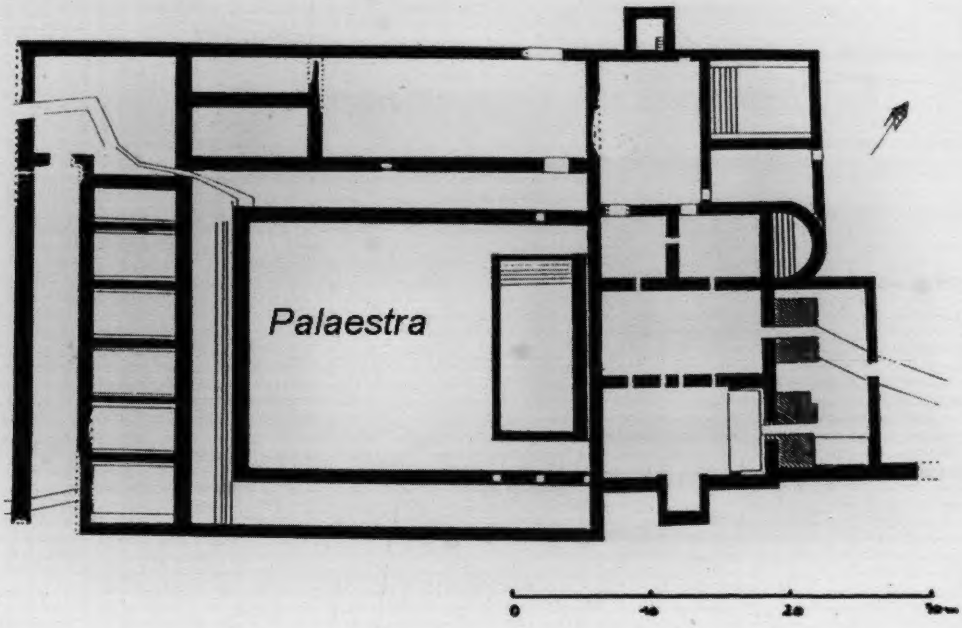

Figure A3.24.3

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[358] Thébert (2003) p.275.

[359] Thouvenot (1945) p.162 and Lenoir (1986) pp.11 & 45.

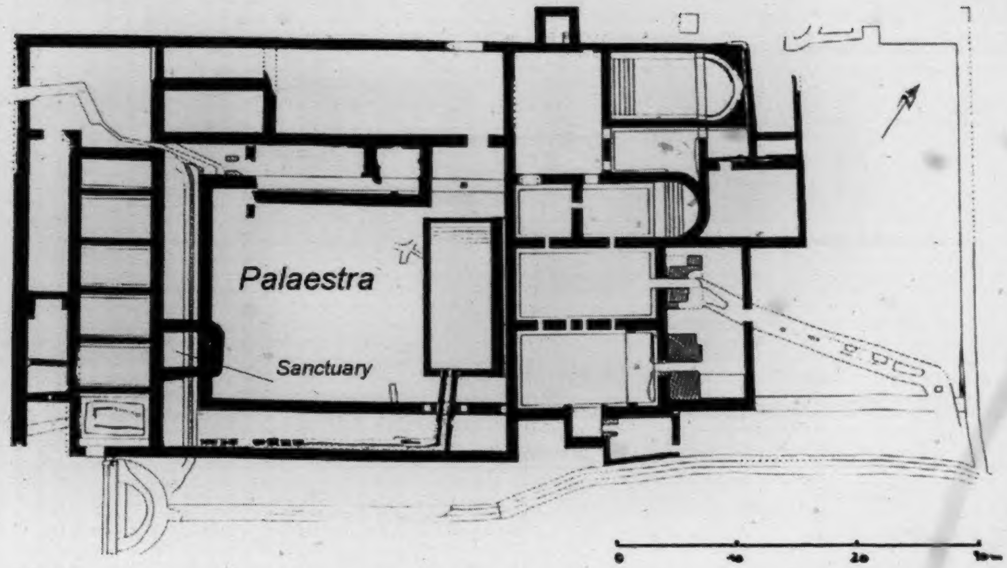

Figure A3.24.4

3) Artworks associated with the *palaestra*

No mosaics were found in any section of the North Baths, but Thouvenot states that the baths possessed "remarkable architectural decoration".[360] Thouvenot also mentions that a male statue was discovered on the east side of the pool.[361]

4) Date of *palaestra*

Before the work of É. Lenoir, the baths were dated to sometime before the end of the 2nd century AD.[362] Her work has subsequently determined that there were many stages of building and that the initial construction of the baths was during the reign of Vespasian (end of 1st century AD). She suspects that the *palaestra* was a part of the original design of the North Baths and that sometime at the beginning of the 2nd century the area was significantly altered.[363] Even more changes are thought to have begun at the start of the 3rd century AD.[364] One such significant alteration was the addition of another *frigidarium* in the north part of the *palaestra*.[365] The baths were continually used until at least the end of the 3rd century.[366]

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[360] Thouvenot (1945) pp.163-164. The decorations were typically geometric designs.
[361] Thouvenot (1945) p.157. No information is given about this statue. See Lenoir (1986) pp.102-109 with regards to the material remains found in the *palaestra*.
[362] Thouvenot (1945) p.165.

5) Excavation Bibliography

Thouvenot, R., « Les thermes du Nord », *PSAM* 7 (1945) pp.156-165
Lenoir, É., *Les thermes du nord à Volubilis, rechereches sur l'époque flavienne au Maroc*, thèse de doctorat, (Paris-Sorbonne, 1986)
______ « Thermes Romains de Maurétanie Tingitane » in *Les thermes romains. Actes de la table ronde de Rome, 11-12 nov. 1988* collection de l'EFR, 142, (Rome, 1991) pp.151-160
Nielsen, I., *Thermae et Balnae. The Architecture and Cultural History of Roman Public Baths* (Aarhus, 1990) pp.66, 69 & 72
Thébert, Y., *Thermes Romains D'Afrique du Nord* (Rome, 2003) pp.273-275

6) Textual evidence

None.

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[363] Lenoir (1986) p.62 and Lenoir (1991) p.157. She bases this on the material evidence uncovered from the *palaestra*.

[364] Nielsen (1990) v.2, p.18 believes that the inscription *AE*, 1922.57 suggest the baths were rebuilt during the reign of Gordian.

[365] For the materials found in this area see Lenoir (1986) pp.102-109. Thébert (2003) p.273 believe that the portico was removed around the beginning of the 3rd century AD.

[366] Thébert (2003) p.273.

Appendix Four: Inscriptions and the Vitruvian *Palaestra* (in English)

The inscriptions are organized into two sections. The first section deals with inscriptions found in the baths, or refers to *palaestrae*. They are arranged alphabetically according to the ancient name of the city. The second section deals with all *gymnasium*, athletic, and boxing inscriptions found in North Africa. These are also arranged alphabetically according to the ancient name of the city. Only the relevant portions of the texts are quoted.[1] In every case, when the name of the ancient city is not known the modern name is used instead and inserted alphabetically. If known, the provenance, inscription numbers, and date will be given for all inscriptions. Finally there is an English translation of Vitruvius' description of a *palaestra*.

Section 1

Palaestrae in North Africa

Bulla Regia (Annaba): The Memmian Baths

1. Found on the base of a statue in the Memmian baths.
ILAfr.454; *AE*, 1921.45
AD 220-240

[*Iul*]*iae Me*[*m*]*mia*[*e/-*]*cae Ruf*(?)[*ilianae* ?] *Aemi/*[*liana*]*e Fidia*[*nae*] *claris/*[*simae et sanctis*]*s*[*imae* ? *f*]*eminae/*[*C. Memmii I*]*ul*(*ii*) *Albi*(*i*) *c*[*o*]*nsularis* / [*viri patr*]*oni et alumni fil*(*iae*) *ob* / [*praecip*]*uam operis sui thermarum* / [*magnifi*]*centiam qua et patriam* / [*suam e*]*xornavit et saluti civium/* [*sumptumagnif*?]*ico consulere* / [*-dignate* ?] *est* / [- -] *bene et pius* / [- - *pa*]*tronae et* / [*alumnae* ? - - -

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[1] Following, in part, G.G. Fagan, Gifts of Gymnasia: A Test Case for Reading Quasi-Technical Jargon in Latin Inscriptions" *ZPE* 127 (1999) pp.263-275, esp. pp.272-275.

Cuicul (Djemila): Large South Baths

1. Found in the street along the front of the baths.
AE, 1920.16
AD 183/4

[- - - *Divi*] / *Hadriani pronep(oti), Divi Traiani Parthici abnep(oti), Divi Nervae adnep(oti), resp(ublica) Cuiculitanorum thermas a solo fecit, dedicante / M. Valerio Maximiano, leg(ato) Aug(usti) pro pr(aetore), patrono col(oniae).*

2. Found in various places throughout the baths.
AE, 1935.45 = Leschi *BAC* (1934-35) p.356
AD 183/4

[*Imp(eratori) Caes(ari) M. Aur*]*elio* [*Commodo Antonino / Augusto Pio S*]*arm(atico) Germ(anico) M*[*axi*]*mo, pontif(ici) max(imo),* / [*trib(unicia) pot(estate) VIII* or *IX, imp(eratori) VI* or *VII*], *cos(uli) IIII, p(atri) p(atriae), Divi M. Antonii Pii Germ(anici)* / [*Sarm(atici) f*]*il(io), Div*[*i P*]*ii nep(oti), Divi Hadriani pronep(oti), Divi Traiani* / [*Part*]*hici abnep(oti), Divi Nervae adnep(oti), res publica* / [*C*]*uicu*[*litanorum the*]*rmas a solo fecit, dedicante* / [*M. Valerio Maximi*]*ano, leg(ato) Aug(usti) pr(o) pr(aetore).*

3. Found on a pedestal base in the *palaestra*
Ballu *BAC* (1919) p.94 & 95
Unknown date

On one side
Q. Gresio / Q. F. Pap. Ter/tullo. II Vi/ro Aed. Q. / ex *Legatis / Testamen/tis Amicoru*

On the other side
Sex. Caecilio / C. Fil. Quir. / Maximo / Patri / Rarissimo

Hippo Regius (Annaba): Large North Baths

1. Found in the small room between the *frigidarium* and *caldarium*.
Marec, *Bull. Acad. Hip.* (1925-1927) p.17
AD 211-217

[*Divo Pio*] *Severo P*[*ertinaci - / -, pat*]*ri domini no*[*stri Imp(eratoris) Caes(aris) / M. Aureli(i)*] *Antonini* [*Aug(usti) / Hip*]*ponienses* [*Regii / d(ecreto)*] *d(ecurionum) p(ecunia) p(ublica).*

Karthago (Carthage): Antonine Baths

1. Perhaps it was a part of the edifice.
CIL, 8.12513; *ILTun*.890
AD 145-161

[Ex] permissu [--] Optimi Maximique principis Imp(eratoris) Caes(aris)/ T. Aelii Hadria[ni Antonini A]ug(usti) Pii [Britt(anici) ? Ge]rmanici Dacici, [po]nt(ificis)/ maximi, cos(ulis) IIII, t[ribunicia]e potesta[tis -] I, p(atris) p(atriae), *pro[consulis -]/ et M. Aelii [Aurelii Veri Cae]s(aris) ceterum[q]ue liberorum [eius - / - aquam magno u ?]sui futuram thermis [- / - - cir]cuitum marm[oribus - - / - -]it pra[etera ? - -]s et orn[amentis - - / -]bus colonia Con[cordia Iulia Karthago - / -] beneficiis eius au[cta - - / -]us Val[.]*

2. Possibly located in one of the *palaestra*.
AE, 1949.27
AD 162

Pro salute Imp(eratoris) Caes(aris) M. A[urelii Antonini Aug(usti), pont(ificis) max(imi), trib(unicia) potest(ate) XVI, cos(ulis) III et Imp(eratoris) Caes(aris) L. Aureli(i) Veri Aug(usti), trib(unicia)] potest(ate) II, cos(ulis) II, / Divi Antonini filiorum, D[ivi Hadriani nep(otum), Divi Traiani Parthici pronep(otum), Divi Nerv]ae a[bnep(otum) totius]que domus eorum, / col(onia) Con(cordia) Iul(ia) Karthag[o - - A]ugus[t - -] numidic(is) donavit, / Q. Vocon[ius Saxa Fidus, v(ir) c(larissimus), procos(ul) prov(inciae) Africae, dedicavit - -]o.

Lambaesis (Lambese): Large Baths/Palais du Légat

1. Found in one of the rooms near the latrine.
Ballu, *BAC* (1911) p.100
Unknown, perhaps AD 161-177

M. Aurel. Anto

Lepcis Magna (Labdah): Hadrianic Baths

1. Found along the north side of the baths facing the *palaestra*.
IRT.361
Hadrianic (AD 117-138)

Imp(eratore) Caesar[e d]ivi [Tra]ian[i Par]thici f(ilio) [divi] Ner[vae] n(epote) Traia[n]o Had[riano] Aug(usto) p[on]t[(ificis) max (imo) tr]ib[(unicia) pot(estate)] XI [co(n)s(ule) III p(atre)] p(atriae)

… P(ublius)] Valerius Priscus proco(n)s(ul) per [P]opilium Cele[rem leg(atum suum …

Many other parts of the inscription were found but they are very fragmentary.

2. Found in the west exedra.
Bartoccini (1929) p.93
Unknown, perhaps Hadrianic

dedicavit …. / opus ther[*marum …*

3. Found in the west exedra.
Bartoccini (1929) p.93
Severan period ? (Early 3rd century AD)

Memoriae / M(arci) Pompei / Gaetulici M(arcus) / Pompeius Geta / Chirit et Mar/cia Rerycth pa/rentes filio / piissimo ex / decreto ordi/nis posuer(unt)

Sufetula (Sbeïtla): Large/Winter Baths

1. Found in the wall of the room facing the entrance of the baths.
ILAfr.139
First half of 3rd century AD

Carpenti / L. Valgio, L. fil(io), Quir(ina tribu), Forti, fl(amini) p(er)p(etuo) / eximiae adfectionis et / praestantiae in singulos / universosque viro / Antonii Priscianus et / Argentius et Aelius / Maiulus parenti incom/parabili.

2. Found on some blocks in one of the rooms along the northern street.
ILAfr.141; *AE*, 1921.30
Unknown, possibly beginning of 4th century AD

- - - *cellam*?] *piscinalem thermarum hiemalium squallentem* [- - -

Thamugadi (Timgad): Filadelfis Baths

1. Found in byzantine fortress.
CIL, 8.2369, 2370
AD 213

Imp(eratori) Caes(ari) M. Aurelio Severo Antonino Pio Felici Aug(usto), Parth(ico) / Max(imo), Brittan(ico) Max(imo), Germ(anico) Max(imo), pontif(ici) max(imo), trib(unica) pot(estate) XV[*I*], *imp(eratori) III, cos(uli) IIII, p(atri) p(atriae) et Iulia / Augusta Pia Felice, matre Aug(usti) et castrorum, itemque senatus et patriae, / ambitum fontis cancellis aereis conslusum, itemque porticus virdiari(i) picturis / exornatas ianuis* *et pronais ad easdem porticus apertis item opus plateae / a thermis usque ad introit(um) perfectum, respublica Tam[u]*g*(adensium), d(ecreto) d(ecurionum).*

Thamugadi (Timgad): Large East Baths

1. Found on two large blue limestone flagstones in the baths.
Ballu, (1903) pp.58-59
AD 167-168

[Imp(eratore) Caes(are) M. Aureli]o Antonino Armenicao Parthico Maximo Medico Augusto / [pontifice maximo, i]mp(eratore) V, tribunicia potestate XXI, cos(ule) III, patre patriae et / [Imp(eratore) Caes(are) L. Aurelio] Vero Armeniaco Parth(ico) Max(imo) Medico Augusto, pontifice maximo, imp(eratore) V, / [tribunicia potestate VI]I, procos(ule), patr(e) patri(ae), Diui Antonini Pii fili(i)s, Diui Hadriani nepotibus, / Diui Traiani Parthi]ci pronepotibus, Diui Nervae abnepotibus, thermas ampliatas / [M. Lucceius Torquatus Bassianus, leg(atus)] Aug[g(sutorum) propraetore, patronus coloniae dedicavit]. D(ecreto) d(ecurionum), p*(ecunia)* p*(ublica).*

Thamugadi (Timgad): Large South Baths

1. Found in change room.
AE, 1894.44, *Bull.arch.du Comité*, 1893, p.160 n.39
AD 198-199

Imp(eratori) Caes(ari) Divi M. Antonini Pii Germanici Sarm(atici) filio, Divi Commodi fratri, Divi Antonini Pii nepoti, Divi Hadriani pronep(oti), / Divi Trajani Parthici abnep(oti) *Divi Nervae adnepoti, L. Septimio Severo Pio Pertinaci Aug(usto) Arabic(o) Adiab(enico), / Parthico Maximo, pontifici maximo, tribunic(iae) potestatis VI<I>, imper(atori) {I}XI, co(n)s(uli) II, pat[r]i patriae, proconsuli et / Imp(eratori) Caes(ari) L. Septimi(i) Pertinacis Aug(usti) Arabici, Adiabenici, Parthici maximi fil(io), Div[i M. Antonin]i Pii German[ici] / Sarmatici nepoti, Divi Antonini Pii pronepoti, Divi H[adriani abn]epoti, Divi [T]rajani Part(hici) et Divi Nerv(ae) ad(nepoti), / M. Aurelio Antonino Aug(usto) principi juventutis forti[ssimo, felicis]simo indulgentissimoq(ue), thermas / ampliatas decreto decurionum pecunia publica, l[eg(ato) Q. Anicio] Fausto Aug(ustorum duorum) pro praetore, patr(ono) colon(iae).*

2. Found on pedestal at north door leading to gallery east of the interior *palaestra*.
CIL, 8.2342, Boeswillwald (1905) pp.224-225
After 4th century AD

Concordiae / populi / et ordinis, / quod sumtus / rei p(ublicae) / manibus / copiisque / relevave/rint.

3. Found on the base of a statue in the north section of the interior *palaestra*, facing the door to the east gallery.

CIL, 8.2380, Boeswillwald (1905) pp.227-228
AD 256

[*Imp*(*eratori*)] *Cae*[s(*ari*) *P. Li/cinio Valeri*]*ano* / [*Invi*]*cto Pio Fe/lici Aug*(*usto*) / *pontif*(*ici*) *max*(*imo*) *Ger*(*manico*) / *Max*(*imo*) *trib*(*unicia*) *pot*(*estate*) / *IIII*, *co*(*n*)*s*(*uli*) *III*, (*patri*) *p*(*atriae*), / *proco*(*n*)*s*(*uli*), *resp*(*ublica*) *col*(*oniae*) *Tha/mug*(*adensis*) *devota* / *numini ma/iestatiq*(*ue*) *eo/rum*.

4. Found on the base of a statue in the west section of the interior *palaestra*, facing the door to the east gallery.

Bull.arch.du Comité, 1894, p.362, Boeswillwald (1905) pp.228-229
AD 254-257/258

Corneliae / Saloninae / Aug(*ustae*) *coniu/gi d*(*omini*) *n*(*ostri*) *P. Licini*(*i*) / *Gallieni*, / *matri / P. Corneli*(i) / *Licini*(*i*) *Vale/riani nobi/lissimi Caes*(*aris*) / *Aug*(*usti*) *et cas/tror*(*u*)*m se/natu*[*s et patriae col*(*onia Tham*(*ugadensis*) *devota*].

5. Found on the base of a statue in the south section of the interior *palaestra*.

CIL, 8.2383, Boeswillwald (1905) p.229
AD 258-260

P. Licnio Cor/nelio V[*aleri*]/*ano nobilis/simo Caesari* / *Aug*(*usto*) *respub*(*lica*) / *coloniae* / *Thamugad*(*ensis*) / *numini* / *maiesta/tique eius* / *devota*.

6. Found on the base of a statue in the east section of the interior *palaestra*.

CIL, 8.2382, Boeswillwald (1905) pp.229-230
AD 255-257

P. Cornelio / Licinio / Va/leriano / nobilissi/mo Caes(*ari*) / *Aug*(*usto*) *resp*(*ublica*) / *col*(*oniae*) *Thamugad*(*ensis*) / *numini maiesta/tique eius* / *devota*.

7. Found on the base of a statue in one of the hot rooms between the two pools.

CIL, 8.2366, Boeswillwald (1905) pp.244-245
AD 178-192

Crispinae / Aug(*ustae*), / *Imp*(*eratoris*) *Caes*(*aris*) / *L. Aeli*(*i*) *Au/reli*(*i*) *Com/modi Aug*(*usti*) / *coniugi*, / *d*(*ecreto*) *d*(*ecurionum*) *p*(*ecunia*) *p*(*ublica*)

8. Found on the base of a statue in one of the hot rooms.

CIL, 8.2381, Boeswillwald (1905) pp.245-246
AD 255

Imp(*eratori*) *Caes*(*ari*) *P. Li/cinio Gallie/no Invicto* / *Pio Felici Aug*(*usto*), *pont*(*ifici*) *m*[*aximo*], / *Ger*(*manico*) *M*[*ax*(*imo*)], *tr*(*ibunicia*) / *pot*(*estate*) *III*, *c*[*os*(*uli*) *II*], / *p*(*atri*) *p(atriae), pro[cos(uli)], / resp(ublica) col(oniae) Tha/mug(adensis) dev[ota] / numini ma/iestatiq(ue) eorum.*

Thuburbo Maius (Henchir Kasbat): Summer Baths

1. Found in the Summer Baths in many pieces
ILAfr.273.A et B, *AE*, 1916.87 & 88 and Merlin (1916) pp.41-50
Face B is dated to AD 361, while face A, although it mentions the same Annius Namptoius, appears to have been rededicated. This would make the changes after 361.[2]

A - - - - / *cum[-]me [. Thermas a]estivale[s - - /] eorum [- desi]derio [-] popu[l -] dolori [--] / et non [-]ris oper[-]edib*(or *p*)*e[-] praecisis [-]us mo[. /]que hu[more iam ? supe]rfluo [m]agis fl*(or *i*)*eban[tqu]am pro[ba* or *lue]bant, vigili cura sollertique / [lab]ore inpens[o i]ntra septimum mensem, adiecti[s] amnibus perfectisque cunctis / quib[u]s lavacra indigebant, Ann[i]us Namptoius, fl(a)men p(er) [p](etuus), iuris consultus, [magister] / studi[or]um, cur(ator) reip(bulicae), cum Thu[burbitan]ae urbis florentissimo sena[tu] / c[u]n[ct]aque eius p[l]e[be / per]feci[t, e]xcolvit, dedicavit.*

B – [*Beatissimo saeculo ? dd(ominorum)] nn(ostrorum) C[onstanti(i) Pii Fel]ici[s Maxim]i / [et invictissimi Aug(usti) ?] et Iuli[ani no]bil[issimi] Cae[saris, / pro]co[ns]ulatu Clo[di(i) H]ermogenian[i, v(iri) c(larissimi), p]roc(onsulis) [p(rovinciae) A(fricae) et le]gatione [Crepe]rei(i) / Optatiani, v(iri) c(larissimi), leg(ati) Karthag(inis), [t]hermas [aes]tivales po[s]t ann[os solidos] octo / [in]tra septimum mensem, a[d]iectis omnibus perfectisq[ue] cuncti[s / qu]ibus lavacra ind[i]gebant, Ann[i]us Nampto{iu}ius, fl(a)m(en) [p](er)p(etuus), / iuris consultus, magister st(udiorum), cur(ator) reip(ublicae), cum Thub[ur]bi[t]anae / [u]rbis ordine amplissim[o c]unct[a]que eius plebe / [per]fecit, excoluit, dedicavit.*

Thugga (Dougga): Licinian Baths

1. One third of inscription found in Licinian Baths.
ILAfr.573 are the two fragments not in the baths. *ILTun*.1500 is all three fragments. Also *AE*, 1925.31 and Poinssot et Lantier, *BAC* (1925) pp.XXXII-XXXIII
AD 378-383

Atrium thermar[um Anton ? or *Lic]inianarum ab antiquis c[oe]ptum excep/toriis in eodem loco su[biectis] quod inperfecto opere corruptum adque / ruderibus foedatum [erat, -]dius Honorati(a)nus, fl(amen) p(erpetuus), cur(ator) reip(ublicae) II, [cu]m statua / signoq(ue) felicissimi Fl. Gr[atian]i CCCRATU opere perfecit itemq[ue dedica]vit.*

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[2] Y. Thébert, *Thermes Romains D'Afrique du Nord* (Rome, 2003) p.495 suggests it may be eight years later when the baths were restored.

Thysdrus (El Djem): Large Baths

1. Found in the cisterns.
CIL, 8.22853
AD 324-333

- - - *a*]*ntea cultu* / [- - -] *rectu formatas* / [- - -] *pro beatudine saeculi* / [*ddd*(*ominorum*) *nnn*(*ostrorum*) *Imp*(*eratoris*) *Flauii*] *Constantini Maximi Victoris* / [*ac Triumf*(*atoris*) *semper Aug*(*usti*) *et Const*]*antini et Constanti nobilissorum* / [- - -]*ne Caesarum, in meliorem faciem mac* / [- - - / - - - *s*]*peciem decor* [- - - / - - - *instant*?]*e Val*(*erio*) *I* [- - - / - - -]*caio Ti*[- - -

Section 2

Gymnasium, athletic, and boxing inscriptions in North Africa

1. Aradi
   CIL, 8.23862 (AD 183-4) : ... [*sua*] *pecunia fecit et* / [*ob dedicationem sportulas decurionibus et epu*]*lum et gymnasium populo dedit.*

2. Bisica Lucana (Henchir Bijga)
   CIL, 8.1361 + 1414 + 14884 (2nd or 3rd century AD) : [-- *aedem*? *c*]*um omnibus*[*s*] *ornamentis suae* / [-- *p*]*opuli epulas et gymnasio CAE*/[-- *de*]*derunt itemq*(*ue*) *dedicaverunt.*

3. Bisica Lucana (Henchir Bijga)
   CIL, 8.1353 (AD 276-282) : ... [*gymn*]*asium et ludos* ...

4. Furnos Minus
   AE, 1909.162 = *ILS*.9403 = *CIL*, 8.25808b (ca. AD 232) : ... *universus populus / ex aere conlato statuam / posuit ob cuius dedicatio/nem ipse ludos scaenicos / et epulum populo dedit et gymnasium* ...

5. Giufi (Bir M'Cherga)
   CIL, 8.858 = *ILS*.5073 (early 3rd century AD) (Found in some rubble near a well) : … *ob honorem aedilitatis … hanc statuam … ex HS VIII millibus* {sic} *n*(*ummum*) … *summa honoraria posuit eandemque dedica/vit et ob dedicationem simul cum Annio Memmi/ano collega suo ludos scaenicos et gymnasi/um populo et aepulas* {sic} *decurionibu*(*us*) *dedit* ...

6. Giufi (Bir M'Cherga)
   CIL, 8.860 (early 3rd century AD) (Found in cemetery) : {sc. *statuam*} *aedil*[*e*]*s … fecerunt et ob dedicationem / ludos scaenicos* [*biduo? edi*]*derunt gymn*[*asium populo*] */ epulum decurion*[*ibus dederunt*] ...

7. Giufi (Bir M'Cherga)
   CIL, 8.12381 (early 3rd century AD) (Found in cemetery) : … {sc. *statuam*} *fecerunt et ob / de*[*dic*]*atione*[*m gy*]*m/nasium* [*p*]*o*[*p*]*u*[*lo*] *de/derunt …*

8. Gor (Hr. Drâa el-Gamra)
   CIL, 8.762 = *ILTun*.769 (late 2nd or 3rd century AD) (Found on a pedestal) : … *o*]*b cuius dedicationem /* [--] *r*(*ei*) *p*(*ublicae*) *X mille policitus* {*sic*} */ est* [*ut* --] *ex reditu eorum /* [--] *quamdiu* [-- *bi*?]*duum /* [--] *pugile*[*s et* -- / --] */ et epulum decurionibus* [--] */ et post d*[..] *sua* [--] / *P*[--] / *ita AB*[--]. / *L*(*ocus*) *d*(*atus*) *d*(*ecreto*) *d*(*ecurionum*).

9. Gor (Hr. Drâa el-Gamra)
   CIL, 8.12421 = *ILS*.5071 = *AE*, 1941.157 = *IlTun*.766 (3rd century AD) (Found in some rubble) : … *rei public*(*icae*) *suae HS IIII mil*(*ia*) */ n*(*ummum*) *inferenda repromisit ut ex eius / summae reditum* {sic} *id est usurae* (*denariorum*) *LX / die XVI Kal*(*endas*) *Ian*(*uarias*) *natalis eius pugili/bus et gymnasio itemque decurio/nibus epulo suo quoque anno in per/petuum ab eadem re p*(*ublica*) *insumerentur …*

10. Gor (Hr. Drâa el-Gamra)
    CIL, 8.12422 (late 2nd or 3rd century AD) (Found in some rubble) : … *testamen/to suo r*(*ei*) p(*ublicae*) *suae Goritanae HS XII mil*(*ia*) */ n*(*ummum*) *dedit ex cuius usuris die natali / suo Idibus Septembr*(*ibus*) *quodannis / decuriones sportulas acceperent* {sic} *et / gymnasium universis civibus …*

11. (Hr. ben Glaya)
    CIL, 8.14378 (AD 169-70) : ... [*templum cum ornamentis*?] *et columnis duabus cum opere ded*[*icavit / -- et ob dedicati*]*onem populo gymnasium et* [-- *dedit*?].

12. (Hr. Esch-Schoor)
    CIL, 8.11998 = *ILS*.5072 (2nd or 3rd century AD) (Found in the rubble of Arabic huts near the banks of Siliana) : … [*ob honorem*] *flamoni* [*ex / summa h*]*onoraria HS II m*(*ilia*) *n*(*ummum*) *… et ob dedicationem / sportulas decurionibu*(*us*) *eisdem/que et universo populo epu/lum et gymnasium dedit / itemque spectaculum pugi/lum et aurigarum et ludo/rum scaenicorum edidit.*

13. (Hr. Sidi-Naui)
    CIL, 8.754 + 12218 = 23107 (AD 196) : … *templum … simulacro auro reculto solo publico / cons*[*u*]*mmavit idemque dedicavit et ob dedicationem sportulas decurionibus item epulum et gymnasium universis civibus dedit / et spectaculum ludorum scaenicorum ed*(*idit*).

14. Lambaesis (Lambese)
    AE, 1914.19 (2nd or 3rd century AD) (Found in Large Baths/Palais du Légat) : *gymnasium quodannis / III Iduum Aprilium hic praebetur.*

15. Limisa (Ksar Lemsa)
    KSL.183, in Abdallah (2004-05) pp.124-125 = *AE*, 2004.1700 (Undated) (Found in modern house) : … / *s*[*ua pec*]*unia fecit et die dedica/tionis spectaculo at*[*h*]*letarum / edito decurionibus sportu/las itemque populo gymnasium / et vinum passim dedit loco dat*(*o*) *d*(*ecreto*) *d*(*ecurionum*).

16. Madaurus (Mdaurouch)
    AE, 1917-18.15 = *ILAlg*.2089 (AD 198-211) (Found near the Large Baths) : *statuam / qu*[*am p*]*ro honore aedili*(*itatis*) */ amplius ad legitimam / pro*[*o*]*miserat inlat*[*a pri*]*us honoraria feci*[*t et*] */ gymnasio dato dedica/vit.*

17. Madaurus (Mdaurouch)
    AE, 1919.44 = *ILAlg*.2130 (2nd or 3rd century AD) (Found among fortress ruins) : … *quodq*(*ue*) *in eum honorem fl*(*amoni*) *p*(*er*)*p*(*etui*) *contulisset arcum et s*[*tatuam inlatis*] *rei pu/bl*(*icae*) *omnibus honorariis summis sua pec*(*unia*) *ex HS XL mil*(*ibus nummum*) *fecit et ob dedicatio*[*nem sportulas decuri*]*oni/bus et epulum curiis et gymnasium populo dedit.*

18. Madaurus (Mdaurouch)
    AE, 1931.41 (3rd century AD) : *et p*[*opulus statuam*] */ suis su*[*mptibus posuerunt*] */ ob cuiu*[*s dedicationem*] */ idem Fl*[*avius --*] */ spo*[*rtulas*]*/ decur*[*ionibus dedit*] */ et curiis epulum? et*] */ popu*[*lo gymnasium?*].

19. Membressa
    CIL, 8.25836 = *ILS*.8926 (AD 275-276) (Found in the wall of the Byzantine camp) : … *aedem quam?*] *ex HS XVI mil*(*ibus*) *n*(*ummum*) *facere promiserat mult*[*iplicata pecunia -- cum*] */ Numisiis Praetextato et Primo fili*(*i*)*s et Nonia* [*-- coniuge --*] */ et certamina pugilum edidit. …*

20. Mustis
    CIL, 8.1577 + 15572 (AD 239) (Found on triumphal arch) : … *arcum* … [*-- inlata legiti*]*ma summa* … [*a*]*di*[*ec*]*t*[*is -- superpositis*] *statuis … dedicavit datis /* [*-- et sportulis decurionibus?*] *omnibus et gymnasio uniu*[*s diei et epulis? univer*]*sis popularibus.*

21. Mustis
    CIL, 8.1587 + 27441 (Undated) : … [*-- decurionib*]*us sportulas populo epulum et gymnasiu*[*m dedit?*].

22. Mustis
CIL, 8.15576 = *ILTun*.1538 (AD 164) (Found on a marble monolith) : … *templum quod … ex HS XXX mil(ibus) n(ummum) … consummavit … ob dedicationem triduo ludos decurionibus sportulas populo epulum et gymnasium dedit.*

23. Mustis
CIL, 8.15578 (2nd or 3rd century AD) : … *arcum cum parietibus coniunctis et porticus … sua pecunia fecit et epulum ob dedic[ationem decurionibus? et --]N mil(ia) ex quorum usuris quodannis ob diem dedicationis epulum et [gymnasium? s(upra) s(cripta)? darentur].*

24. Numluli
CIL, 8.26121 (AD 169-70) (Found on temple pavement) : *templum Capitoli liberalitate sua / [f]aciendum es HS XX mil(ibus) n(ummum) patriae suae pago et civitati Numlulitanae promisisset et ob honorem flamoni Iuniae Saturninae uxoris suae ex decreto utriusque ordinis HS IIII m(ilia) n(ummum) in id / opus [e]rogass[et] multiplicata pecunia solo suo extruxit et marmoribus et statuis omniq(ue) cultu exornavit itemq(ue) dedicavit ob quam dedicationem decurionibus utriusq(ue) ordinis sportulas / item populo epulum et gymnasium dedit praeterea exigente annona frumenta quantacumq(ue) habuit populo multo minore pretio quam tunc erat benignissime praestitit item ludos scaenicos et gymnasia adsidue dedit.*

25. Sarra
CIL, 8.12006/7 (AD 211) (Found in the pavement of the temple of Mercury) : … *cum patriae suae Vazitanae Sarrae triplicata summa fl(amoni) p(erpetui) HS III m(ilia) n(ummum) aedem Mercurio Sobrio pollicitus fuisset ampliata liberalitate eandem aedem / cum pronao et ara fecit et ob dedicat(ionem) aepulum* {sic} *et gymnasium ded[it]* …

26. Secessitanum (Serressi?)
CIL, 8.11216 (AD 211-217?) (Found in a door arch?) : *Testamento / C. M[e]mmi Felicis Armeniani … arcus factus … mater et … soror … et die dedic(ationis) sportulas decu/rionib(us) et epulum et gymnasium municipib(us) / dederunt* …

27. Sutunurca
AE, 1910.154 = *ILA*.300 (AD 145-6) (Found on a masoleum) : ... *ob honorem flam(oni) perp(etui) / Quintae f(iliae) suae ex HS IIII mil(ibus nummum) legitim(is) / statuam divi Hadriani et L. Aeli Caes(aris) / adiectis a se HS (milibus) DXXV n(ummum) d(ecreto) d(ecurionum) s(ua) p(ecunia) f(ecit) et / ob dedicationem viscerationem et / gymnasium populo dedit.*

28. Sutunurca
AE, 1909.160 = *ILA*.303 (AD 161-2) : ... {sc. *statuam*} *ob [hon]orem / flamoni p(er)[p(etui)] Neri Moci / Septimi ex HS III mil(ibus) n(ummum) po/suit item rei publ(icae) HS (mille) n(ummum) in/tulit ob dedicationem / epulum et gimnasia* {sic} *et / ludos scaenicos dedit d(ecreto) d(ecurionum).*

29. Sutunurca
    ILA.304 (2nd or 3rd century AD) : … *ob honorem flaminat*[*us*] / *sui p*[*erp*(*etui*)] … *templum …cum omni cultu … so*[*lo p*]*rivato fecit et ampli/us in z*]*othecis duabus patri / et matri statuas marmore/as posu*[*it*] *itemq*(*ue*) *dedicavit / et ob dedicationem uni/versis epulum et gymnas/sia dedit d*(*ecreto*) *d*(*ecurionum*).

30. Thabarbusis
    AE, 1960.214 (first half of 3rd century AD) : … *po/pulus Thabarbusitanus / statuam ex HS VI mil*(*ibus*) *DCLXI / n*(*ummum*) *constantem obtulit / quam oblationem liben/ter et grate susceptam / idem Lappianus reddita /* {*n*}*omni pecunia solo ho/nore contentus ampli/us etiam exibito epulo / et gymnasio cum ci/vibus dedicavit.*

31. Thamugadi (Timgad)
    AE, 1941.46 (AD 198-211) (Found on the base of a limestone moulding) : ... *ob honorem fla/moni inlata rei p*(*ublicae*) *legitima / amplius statu<a>m Martis ad ar/cum Pantheum et hic in thea/tro statuas dd*(*ominorum*) *nn*(*ostrorum*) *et / Iuliae Aug*(*ustae*) *ex HS XL mil*(*ibus*) *n*(*ummum*) */ promiserat ampliata pecu/nia HS X mil*(*ibus*) *n*(*ummum*) *ex HS L mil*(*ibus*) *n*(*ummum*) *po/suit et ob dedicationem / curiis epulum et gymnasi/um populo et ludos scae/nicos dedit.*

32. Theveste (Tebessa)
    CIL, 8.1858 = *ILAlg*.3040 (AD 214) (Found inside triumphal arch) : [*Ex test*]*amento C. Corneli Ergiliani … arcum cum statuis … fieri prae/*[*cepit pra*]*eter alia HS CCL mil*(*ia*) *n*(*ummum*) *quae rei p*(*ublicae*) *ita ut /* [*certis diebus gy*]*mnasia populo publice in thermis prae/*[*berentur legavit*] …

33. Theveste (Tebessa)
    CIL, 8.1859 = *ILAlg*.3041 (AD 214) (Found inside triumphal arch) : *dies gymnas*(*iorum*) *ex test*(*amento*) *Corneli Ergiliani* … (64 days are listed)

34. Theveste (Tebessa)
    CIL, 8.16530 = *ILAlg*.3032 (AD 181-87) (Found in the ? baths) : … [*ob honor*(*em*) *d*]*ec*(*urionatus*) *Salvianus pater legitimam /* [--] *in opus erogaret … sportulis etiam de/*[*curionibus datis epulum*? *gymnasium*? *praes*]*tit et ludos scaenicos edidit … cum --fratr*?]*e suo quinquennalic*(*io*) *col*(*oniae*) *Thevest*(*inorum*) *in col*(*onia*) *Karthag*(*ine*) / [-- *decurioni*(*bus*? *curiis*? *Aug*]*ustalib*(*us*) *epulum gymnasium populo praestitit et* [-- / --] *d*(*e*) *s*(*uo*) *p*(*osuit*).

35. Thibica (Bir Magra)
    CIL, 8.769 + 12224 (late 2nd or 3rd century AD) (Found on a high pedestal?) : … *f*[*l*(*amen*) *p*(*er*)*p*(*etuus*)] … *ob honorem patriae / suae multiplicatis summis hono/raris aedilitatis / sua liberali/tate fecerunt et die dedicationis / sportulas decurionibus et epulum / et gymnasium* {sic} *civibus dederunt* …

36. Thibursicum Bure (Teboursouk)
CIL, 8.1449 (undated) : …] *et gymnasium dedit.*

37. Thuburbo Maius (Henchir Kasbat)
ILTun.718 (AD 212) : … [*ob honorem*] *flaminic*[*atus* -- *t*]*estam*[*ent*]*o su*[*o* --] … [-- *et ob diem ded*]*icationis sportul*[*as*] *dec*(*urionibus*) [*et* -- / -- *g*]*eminis gym*[*n*]*asia* [*publi*]*ce* [*de sua*] *pec*[*unia dari iussit*].

38. Thugga (Dougga)
CIL, 8.1500-1502 + 15509 = 26458 = *ILAfr*.514 (AD 145-161) (Re-used in a temple) : {sc. *statuam*} [*quod ob hon*]*ore*[*m fl*]*amonii perp*[*etui* --] … [-- *p*]*erfecit excoluit et cum statuis ceterisq*(*ue*) *solo privato dedicat*[*is*] … [*ob*] *diem dedicationis rei p*(*ublicae*) *n*[*u*]*me*[*ratis* --] *ded*[*it adiec*]*tis sportulis et epulo et gymnasio* / [--] *ludis ed*[*itis* --] …

39. Thugga (Dougga)
AE, 1904.115 = *CIL*, 8.26527 (AD 164-68) : ... *in* [*amorem*] *civitatis su*[*a*]*e fecit idemq*(*ue*) *edito s*[*pe*]*c*[*taculo l*]*udor*(*um*) *tri*[*duo decurion*]*ib*(*us*) *spor*[*tulas*] *et univ*[*erso populo*? *epulum et gymnasi*]*um dedit et ded*(*icavit*).

40. Thugga (Dougga)
CIL, 8.26591 (AD 205-53) (One part found in the theatre and another part found in a house next to theatre) : … [-- *ob flam*(*inicatum*)] / *HS C mil*(*ia*) *n*(*ummum*) *patriae suae donaverit ex* [*quorum red*(*itu*) *dec*(*urionibus*)] / *utriusq*(*ue*) *ordinis sportulae curiis e*[*pulum et universo*] / *populo gymnasia praestantur lud*/[*ique scaenici*? *dentur*] …

41. Thugga (Dougga)
CIL, 8.26606 = *ILS*.9364 = *ILTun*.1434 (AD 165) (Found in the theatre) : … *ob honorem flaminatus sui perpet*[*ui*] *patriae suae* / *theatrum cum basilicis et porticu et xystis et scaena cum siparis et ornamentis om*[*n*]*ibus a* [*solo ext*]*ructum sua pec*(*unia*) *fec*(*it*) *idemq*(*ue*) *ludis scaenicis editis et sportulis datis epulo et gymnasio ded*(*icavit*).

42. Tichilla (Testour)
CIL, 8.1353=14891 (AD 276-82) (Found in Jewish cemetery) : … *statuam al*/[*teram civibu*]*s suis de den*(*ariis*) *VII* (*milibus nummum*) *ob a*[*m*/*orem patriae* – *gymn*]*asium et ludos* [*scaenicos*? *dedit*?].

43. Tuccabor
CIL, 8.1323 = 14855 = *ILTun*.1288 (2nd or 3rd century AD) : … [*ob honorem fl*(*amoni*) *p*]*erp*(*etui*) / [-- *mil*]*ia* / [*praeter legitim*]*am promisisset mul*/*tiplicata pecunia perfecit et* / *dedicavit et ob dedicatio*/*nem pugilum certamina* / *edidit et decurionibus* / *sportulas et populo gymna*/*sium epulum dedit et hoc* / *amplius pro sua liberalita*/*te cameram superposuit et* / *opere museo exornavit* / [*itemq*(*ue*)] *cum M*[--]*eis Felice et* / *Rufino* [*fil*]*is ded*(*icavit*) *ob quam* / *dedicat*(*ionem*) *epul*(*um*) *dec*(*urionibus*) *et pop*(*ulo*) [*g*]*ym*(*nasium*) *ded*(*it*).

44. Tuccabor
    CIL, 8.14856 (After AD 161) (Found in two pieces in a private building) : *ob de*[*dicatio*]*nem s*[*portulas / decurionibus et epulu*]*m et gymn*[*asium et*] *ludor*[*um scae/nicorum*? *specta*]*culu*[*m populo*?] *dedit* [*d*(*e*) *s*(*ua*) *p*(*ecunia*)].

45. Tunis (near Pont-du-Fahs)
    AE, 1995.1657 (Undated) (Found on the road into Tunis on the base of a statue) : … *ob hon*(*orem*) *flam*(*oni*) *sui perp*(*etui*) / *magg*(*istris*) *flaminib*(*us*) *sportul*(*as*) *et de*/[*cu*]*riis singulis binos aureos* / [*et*] *gymna*[*sium*] *biduo populo de*/*der*(*unt*). *D*(*ecreto*) *p*(*aganorum*).

46. Uccula
    CIL, 8.14365 (2nd or 3rd century AD) : … *nam Martensibus gymnasium vinumq*(*ue*) *dedit* …

47. Uccula
    AE, 1973.613 (AD 164-69) : ... *templum* … [*a solo extruxit itemq*(*ue*) *dedicavit*? *et ob dedicationem sportulas*? *decurionibus et gym*]*nasium popul*[*o dedit*].

48. Uchi Majus
    CIL, 8.26259 (AD 212-17) : … [--] *cum imaginibu*[*s -- / -- ob dedicationem decurionibus sportulas*? *popu*]*lo gymnasium* [*dedit*].

49. Vallis (Sidi Mediani)
    CIL, 8.14783 = *ILS*.5075 (late 2nd or 3rd century AD) : … *idem / Egnatius praeter gymnas/ium et missilia quae aedi/les edere solent diem sacri / Liberaliorum auxit et omni in/pensa sua eum civib*(*us*) *universis / exibuit amplius etiam ludos sc*(*a*)*eni/cos edidit et ep*[*u*]*lum populo dedit* ...

50. Ziqua (Villa Magna)
    ILS.5074 = *CIL*, 8.895=12425 = *ILTun*.770 (AD 239) (Found in a private building) : *Marti Aug*(*usto*) … {sc. *statuam*} *ob honorem aedilitatis / in compensatione*(*m*) *missiliorum commu/ni pecunia fecerunt* … *ob cuius statu*[*ae*] / *dedicationem idem Rufinus de su*[*o*] / *eti<a>m spectaculum pugilum et gymnasium / exhibuit* …

51. Ziqua (Villa Magna)
    CIL, 8.24056 = 12426 (late 2nd or 3rd century AD) (Found in a private house) : … [--] *Anniolenus Crescentianus* [*e*]*t / M*(*arcus*) *Simminius Mistlita* … *o*[*b*] *de*/[*d*]*icationem pugi*[*l*]*es edider*[*un*]*t* / [--] / *CROM*.

Section 3

Vitruvius, *De Architectura* 5.11 (English translation by F. Granger in Loeb vol.1 (London, 1931) pp.307-311)

1. Although the bulding of the *palaestra* is not a usual thing in Italy, the method of construction has been handed down. It seems good therefore to explain it and show how the *palaestra* is planned among the Greeks. Square or oblong cloisters are to be made with a walk round them of two furlongs (this walk the Greeks call *diaulos*). Three of the sides are to be single colonnades; the fourth which has a south aspect is to be double, so that when rain is accompanied by gales, the drops may not reach the inside.
2. On the other three sides, spacious *exhedrae* (apsidal recesses) are to be planned with seats where philosopers, teachers of rhetoric and other studious persons can sit and discuss. In the double colonnade, however, these provisions are to be made. In the centre there is to be the *ephebeum* (a large apsidal recess with seats for young men) a third longer than it is wide; on the right the *coryceum* (for exercise with the quintain); next to this the *conisterium* (for athletes to powder themselves); adjoining the *conisterium* at the angle of the colonnade the cold bath which the Greeks call *loutron*; at the left of the *ephebeum*, the *elaeothesium* (for athletes to oil themselves); next to this is the cold room from which the furnace-room is entered at the angle of the colonnade. Adjoining this on the inside in line with the cold room, a vaulted sweating-room is to be placed, twice as long as it is broad, having in the angle of the colonnade the *Laconicum* (domed sweating room) constructed as before described (c. x 5), and opposite this a warm bath. In the *palaestra*, the cloisters ought to be thus completed and arranged.
3. Outside the *palaestra* three colonnades are to be arranged; the first, as you go out of the peristyle; right and left of this, two colonnades with running tracks. Of these three the one which has a north aspect, is to be built double and very wide; the others are to be single. On the sides which adjoin the walls and those which adjoin the columns, they are to have borders ten feet wide to serve as paths. The middle part is to be excavated with steps down from the paths to the level track a foot and a half below, and the track is to be not less than 12 feet wide. Thus persons who walk about on the paths in their clothes will not be distrubed by the athletes who use oil.
4. Such a colonnade is called *xystos* by the Greeks, whose athletes take exercise in the winter on covered tracks. Next to the covered track and the double colonnade walks in the open are to be planned (which the Greeks call *paradromides* and our people *xysta*). When it is fine weather in winter, the athletes come into the open and take exercise here. The *xysta* ought to be so laid out that there are plantations or groves of plane trees between the two colonnades. Here walks are to be made among the trees with spaces paved with cement. Behind the *xystum*, the stadium (sports ground) should be so planned that large crowds can comfortably see the competitors. I have now enumerated the buildings required within the city walls and their suitable disposition.

Appendix Five: Athletic Artworks Found in North Africa

The artworks mentioned in this appendix are illustrations showing athletic activity that were found in North Africa. The artworks are listed under the city from where they were found, as well as categorized under the type of medium, such as mosaic, lamp, etc., on which they were displayed. The cities are arranged alphabetically according to their ancient name. If the ancient name of the city is unknown the modern name will be used and inserted alphabetically. First, if the provenance of the athletic image and its date are known, it will be given. This will be followed by a brief description of the athletic image, as well as a bibliographic source(s), which will provide more information on the artwork. If the artwork was mentioned and illustrated within the body of the thesis, the figure number will also be given.

Althiburus (Medeina)

Mosaics (Figure 1.3)
1) Provenance: The edifice of Asklepeia
Date: During the 4th century AD
Description of athletic image: Shows what could be a crown with the word *asklepeia* in it.
Bibliography: Robert, L., « Une vision de Perpétue martyre à Carthage en 203 » *CRAI* (1982) pp.229-231,

Bulla Regia (Jendouba)

Lamps
1) Provenance: Unknown
Date: Unknown
Description of athletic image: Shows a winner holding a palm, with the inscription *[pul]LAE NORUM.*
Bibliography: Gauckler (1897) Lamps #206

2) Provenance: Unknown
Date: Unknown
Description of athletic image: Shows a winner holding a palm, with the inscription *CCLOSVC*.
Bibliography: Gauckler (1897) Lamps # 207

3) Provenance: Unknown
Date: Unknown
Description of athletic image: Shows a boxer wearing a *caestus*.
Bibliography: Gauckler (1897) Lamps #209

Capsa (Gafsa)

Mosaics (Figure 1.2)
1) Provenance: Found in a small bathing establishment.
Date: c. AD 300
Description of athletic image: Shows many male athletes in various competitions, as well as judges, musicians, and states of celebration.
Bibliography: Khanoussi (1988), Newby (2005) p.85

Castellum Tidditanorum (Tiddis)

Lamps
1) Provenance: Unknown
Date: Unknown
Description of athletic image: It is a fragment showing a wrestler, who wears a *subligaculum* and *caestus*.
Bibliography: Bussière (2000) #539

2) Provenance: Found in the western cemetery.
Date: Unknown
Description of athletic image: Shows a boxer who faces the right, and holds his left arm in the air. He is wearing a *subligaculum* and *caestus*.
Bibliography: Bussière (2000) #259

3) Provenance: Found in the western cemetery.
Date: Unknown
Description of athletic image: Shows two boxers; one looks down at his opponent, while the other raises his hand.
Bibliography: Bussière (2000) #37

4) Provenance: Unknown
Date: Unknown
Description of athletic image: It is a fragment showing a boxer who is naked, with one knee on the ground, and his hands raised in submission. He also wears a *caestus*.
Bibliography: Bussière (2000) #538

Cirta (Constantine)

Lamps
1) Provenance: Unknown
Date: Unknown
Description of athletic images: Shows a boxer, with his head missing, standing and wearing a *caestus*.
Bibliography: Bussière (2000) #540

Gigthis (Bou Ghrara)

Mosaics (Figures 1.8 & 1.9)
1) Provenance: Found in the *tepidarium* of the Central Baths.
Date: End of 2nd – early 3rd century AD
Description of athletic images: There are two mosaics, both showing wrestlers engaged in combat.
Bibliography: Hugoniot (2003)

Hadrumentum (Sousse)

Lamps
1) Provenance: Unknown
Date: Unknown
Description of athletic images: Shows a winner holding a palm branch.
Bibliography: Gauckler (1897) Lamps #205

Pottery
1) Provenance: Unknown
Date: Unknown
Description of athletic images: Shows a runner, holding palm branches and garlands.
Bibliography: Gauckler (1897) Pottery #207

(Henchir Herrich)

Mosaics

1) Provenance: Found in baths.
Date: 6th-7th century AD
Description of athletic image: There are three panels of wrestlers. The wrestlers are named, and are wearing a *cirrus*.
Bibliography: Ben Lazreg (2003) figures 417-419

Iol-Caesarea (Cherchel)

Lamps

1) Provenance: Unknown
Date: Unknown
Description of athletic image: Boxer, turned to right, wears *caestus*.
Bibliography: Bussière (2000) #258

Mosaics

1) Provenance: Found in the Western Baths.
Date: Unknown
Description of athletic image: There are three fragments of athletes. One is of a boxer holding a palm, while for another figure only the head remains.
Bibliography: Dunbabin (1978) p.255, *Inv.Alg.*417.

Karthago (Carthage)

Lamps

1) Provenance: Unknown
Date: Unknown
Description of athletic image: An athlete running to the left.
Bibliography: Deneauve (1969) #1052, British Museum n.627

2) Provenance: Unknown
Date: Unknown
Description of athletic image: A boxer wearing a *caestus* on each hand, as well as wearing a loincloth.
Bibliography: Deneauve (1969) #331, Mainz n.189, Vindonissa n.448

3) Provenance: Unknown
Date: Unknown
Description of athletic image: A pancratic scene; the man on the left is punching his opponent in the head with his right fist and kicking him with his right leg. There is also a mark on the hollow of the lamp reading: CCLO.SVC.
Bibliography: Deneauve (1969) #467

4) Provenance: Unknown
Date: Unknown
Description of athletic image: Two wrestlers; the man on the right holds his opponents left leg in his arms, while the man on the left is on ground and has a beard. There is also a mark on the hollow of the lamp reading: GABINIA.
Bibliography: Deneauve (1969) #468

5) Provenance: Unknown
Date: Unknown
Description of athletic image: Two wrestlers; the man on the right holds his opponents left leg in his arms, while the man on the left is on ground and has a beard.
Bibliography: Deneauve (1969) #469

6) Provenance: Unknown
Date: Unknown
Description of athletic image: Two wrestlers; the man on the right holds his opponents left leg in his arms, while the man on the left is on ground and has a beard. There is also a mark on the hollow of the lamp reading: EROTIS.
Bibliography: Deneauve (1969) #470

7) Provenance: Unknown
Date: Unknown
Description of athletic image: A boxer wearing a *caestus* on each hand, as well as he is wearing a loincloth.
Bibliography: Deneauve (1969) #674

Mosaics

1) Provenance: Found just south of the *caldarium*, right next to the *palaestra* in the Antonine Baths.
Date: Mid 2nd century AD/ restoration from AD 389
Description of athletic image: Are fragments of athletes surrounded by circus horses.
Bibliography: Hugoniot (2003), Picard, *CRAI* (1956) p.426

Sculpture

1) Provenance: Found in the *caldarium* in the Antonine Baths.
Date: Unknown
Description of athletic image: Bust of a wrestler.
Bibliography: Lezine (1956)

(Le Coudiat)

Lamps

1) Provenance: Unknown
Date: Unknown
Description of athletic image: Shows two boxers; the one on the left raises his hand in victory, while the other has his one knee on the ground. Both are wearing a *subligaculum* and *caestus*.
Bibliography: Bussière (2000) #38

Lepcis Magna (Labdah)

Sculpture

1) Provenance: Found in the Hadrianic Baths.
Date: Unknown
Description of athletic image: The nude body of a *palaestrita* (attendant of the *palaestra*).
Bibliography: Bartoccini (1929) pp.142-146

Mactaris (Maktar)

Sculpture

1) Provenance: Found in the Large East Baths.
Date: Unknown
Description of athletic image: There are two pairs of wrestlers at right. The 5th individual could be Hercules because of the club at his feet. The last individual could be Eros, an attendant of Hercules, or a victorious athlete, as he holds a crown in his right hand.
Bibliography: G. Picard, « Un bas-relief agonistique à Mactar » *BCTH* n.s. 18b 1982 (1988) pp.95-99, Hugoniot (2003)

Silin

Mosaics (Figure 1.4)

1) Provenance: Found in the villa Bathhouse.
Date: Unknown
Description of athletic image: Shows a pair of boxers with palm branches on either side of them. There is a table behind them holding crowns and palm branches.
Bibliography: Mahjub, D., "I Mosaici della villa romana di Silin" *LibAnt* 15-19 (1978-79) [1987] pp.69-74

Thaenae (Thina)

Mosaics (Figure 1.10)
1) Provenance: Found in the drying oven of the *caldarium* in the Great Baths.
Date: End of the 3rd century AD
Description of athletic image: Shows three panels. The bottom two panels have a pair of wrestlers in various positions. The top panel has a table with crowns and palm branches on it.
Bibliography: Yacoub, M., *Guide du Musee de Sfax* (Tunis, 1966) nº M2, p.45, pl.XV, 1,

Thapsus (Ras Dimas)

Mosaics (Figure 1.7)
1) Provenance: Found in the *frigidarium* of the baths.
Date: End of 3rd – early 4th century AD
Description of athletic image: There are two panels of athletes; both are profiles of their heads.
Bibliography: Ben Lazreg (2003) figures 312-313

Theveste (Tébessa)

Mosaics
1) Provenance: Found in the baths.
Date: Early 4th century AD
Description of athletic image: Is a grid of squares; the panel at the top shows an athlete named *Mar*[*cell*]*us* holding a palm, and to the right is a judge.
Bibliography: Hugoniot (2003) p.677, Dunbabin, (1978) p.272

Lamps
1) Provenance: Unknown
Date: Unknown
Description of athletic image: Shows two naked wrestlers, with the one on right as the victor. Word GABINIA is present.
Bibliography: Bussière (2000) # 325

2) Provenance: Unknown
Date: Unknown
Description of athletic image: Shows an athlete with a discus under his left arm and a palm in his right hand.
Bibliography: Bussière (2000) #3653

Thuburbo Maius (Henchir Kasbat)

Mosaics (Figure 1.6)
1) Provenance: Found in the *tepidarium* of the Maison du Labyrinthe.
Date: 4th century AD
Description of athletic image: A panel showing two boxers, with the bearded boxer's head bleeding.
Bibliography: Dunbabin, (1978) p.274, Hugoniot (2003)

2) Provenance: Unknown
Date: End of 3rd – 4th century AD
Description of athletic image: Is a mosaic with Venus in the center. She is surrounded by many figures, including athletes.
Bibliography: Dunbabin (1978) pp.274-275, Yacoub, M., *Musée du Bardo. Musée antique* (1970) p.115

Utica (Hr. Bou Chateur)

Mosaics (Figure 1.11)
1) Provenance: Found in the threshold to the *oecus* of a Roman House.
Date: End of 2nd – beginning of 3rd century AD/ 4th century AD.
Description of athletic image: Shows two pairs of wrestlers with a small table in between them holding a crown and two palm branches.
Bibliography: Dunbabin (1978) p.277

Glossary

Apodyterion/apodyterium – change room

caldarium – hot room in baths

conisterium – room where individuals sprinkled their bodies with dust

coryceum – room where war-like exercise took place

cryptoporticus – covered peristyle corridor

destrictarium – room where athletes had dust and oil scraped off

elaeothesium – room where individuals anoint themselves with oil

ephebeum – a room with seats for men

exedra – room open to the *palaestra*, which sometimes had columns and often had benches

frigidarium – cold room in baths

laconicum – sweat-room

loutron – cold-water bath room

opus africanum – technique using massive horizontal and vertical dressed masonry blocks, containing panels of smaller masonry blocks, mud brick, or faced concrete over top a concrete core

opus caementicium – technique of constructing structures using concrete

opus incertum – technique using irregular shaped and uncut stones placed over top a concrete core

opus quadratum – square blocks of stone set in parallel courses, without the use of mortar

opus quasiretculatum – technique using small stones roughly cut in the square shape but irregular enough so that the joint lines do not run straight

opus signinum – technique using a variety of materials, such as pottery, gravel and sand, arranged in limestone or clay and which set hard as stone

opus testaceum – construction technique using bricks over top a concrete core *opus vittatum* –square (but not always) blocks intersected by one or more brickbands at regular or irregular distances

sphaeristerium – room for playing ball games

tepidarium – warm room in baths

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